



SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 239, 249, 270, and 274

[Release No. IC-34084; File No. S7-24-15]

RIN 3235-AL60

Use of Derivatives by Registered Investment Companies and Business Development Companies

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission (the “Commission”) is adopting a new exemptive rule under the Investment Company Act of 1940 (the “Investment Company Act”) designed to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds’ use of derivatives and the other transactions the new rule addresses. In addition, the Commission is adopting new reporting requirements designed to enhance the Commission’s ability to effectively oversee funds’ use of and compliance with the new rule, and to provide the Commission and the public additional information regarding funds’ use of derivatives. Finally, the Commission is adopting amendments under the Investment Company Act to allow leveraged/inverse ETFs that satisfy the rule’s conditions to operate without the expense and delay of obtaining an exemptive order. The Commission, accordingly, is rescinding certain exemptive relief that has been granted to these funds and their sponsors.

DATES: *Effective Date:* This rule is effective February 19, 2021. *Compliance Date:* August 19, 2022. *See* Section II.L of the Supplementary Information.

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SUPPLEMENTARY INFORMATION: Regulations in 17 CFR 270.18f-4 (“rule 18f-4”) will apply to mutual funds (other than money market funds), exchange-traded funds (“ETFs”), registered closed-end funds, and companies that have elected to be treated as business development companies (“BDCs”) under the Investment Company Act (collectively, “funds”). It will permit these funds to enter into derivatives transactions and certain other transactions, notwithstanding the restrictions under sections 18 and 61 of the Investment Company Act, provided that the funds comply with the conditions of the rule. The rule also permits money market funds (and other funds) to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, subject to conditions.

The Commission is adopting rule 18f-4 under the Investment Company Act, amendments to 17 CFR 270.6c-11 (rule 6c-11), 17 CFR 270.22e-4 (rule 22e-4), and 17 CFR 270.30b1-10 (rule 30b1-10) under the Investment Company Act; amendments to Form N-PORT [referenced in 17 CFR 274.150], Form N-LIQUID (which we are re-titling as “Form N-RN”) [referenced in 17 CFR 274.223], Form N-CEN [referenced in 17 CFR 274.101], and Form N-2 [referenced in 17 CFR 274.11a-1] under the Investment Company Act.

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I. INTRODUCTION

The Commission is adopting rule 18f-4 under the Investment Company Act to provide an updated, comprehensive approach to the regulation of funds' use of derivatives. This rule, along with amendments that the Commission is adopting to rule 6c-11 and certain forms under the Investment Company Act, will modernize the regulatory framework for funds to reflect the broad ways in which funds' use of derivatives has developed over past decades, and also will address investor protection concerns related to funds' derivatives use. We are committed to designing regulatory programs that reflect the ever-broadening product innovation and investor choice available in today's asset management industry, while also taking into account the risks associated with funds' increasingly complex portfolio composition and operations. The rules we are adopting reflect these considerations, and are also informed by the Commission's ongoing exploration—particularly over the past decade—of the benefits, risks, and costs associated with funds' current practices regarding derivatives.¹

Under this new framework, funds using derivatives generally will have to adopt a derivatives risk management program that a derivatives risk manager administers and that the fund's board of directors oversees, and comply with an outer limit on fund leverage risk based on value at risk, or "VaR." Funds that use derivatives only in a limited manner will not be subject to these requirements, but they will have to adopt and implement policies and procedures reasonably designed to manage the fund's derivatives risks. Funds also will be subject to reporting and recordkeeping requirements regarding their derivatives use.

¹ See, e.g., Use of Derivatives by Investment Companies under the Investment Company Act of 1940, Investment Company Act Release No. 29776 (Aug. 31, 2011) [76 FR 55237 (Sept. 7, 2011)] ("2011 Concept Release"). The comment letters on the 2011 Concept Release (File No. S7-33-11) are available at <https://www.sec.gov/comments/s7-33-11/s73311.shtml>. See also Use of Derivatives by Registered Investment Companies and Business Development Companies, Investment Company Act Release No. 31933 (Dec. 11, 2015) [80 FR 80883 (Dec. 28, 2015)] ("2015 Proposing Release"); Use of Derivatives by Registered Investment Companies and Business Development Companies; Required Due Diligence by Broker-Dealers and Registered Investment Advisers Regarding Retail Customers' Transactions in Certain Leveraged/Inverse Investment Vehicles, Investment Company Act Release No. 33704 (Nov. 25, 2019) [85 FR 4446 (Jan. 24, 2020)] ("Proposing Release"). The comment letters on both the 2015 Proposing Release and the Proposing Release (File No. S7-24-15) are available at <https://www.sec.gov/comments/s7-24-15/s72415.shtml>.

Funds using derivatives must consider requirements under the Investment Company Act of 1940.² These include sections 18 and 61 of the Investment Company Act, which limit a fund's ability to obtain leverage or incur obligations through the issuance of "senior securities."³ The Commission and its staff have addressed the use of specific derivatives instruments and practices, and other financial instruments, under section 18. In determining how they will comply with section 18, we understand that funds consider Commission and staff guidance, as well as staff no-action letters and the practices that other funds disclose in their registration statements.⁴

In November 2019, the Commission proposed rule 18f-4, an exemptive rule under the Act designed to address the investor protection purposes and concerns underlying section 18.⁵ The proposal also was designed to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives and the other transactions addressed in the proposed rule by replacing the Commission and staff guidance with a codified, consistent regulatory

² 15 U.S.C. 80a (the "Investment Company Act," or the "Act"). Except in connection with our discussion of the proposed sales practices rules (*see infra* paragraph following footnote 7) or as otherwise noted, all references to statutory sections are to the Investment Company Act, and all references to rules under the Investment Company Act, including rule 18f-4, will be to title 17, part 270 of the Code of Federal Regulations, 17 CFR part 270.

³ *See infra* section I.B.1. Funds using derivatives must also comply with all other applicable statutory and regulatory requirements, such as other federal securities law provisions, the Internal Revenue Code, Regulation T of the Federal Reserve Board, and the rules and regulations of the Commodity Futures Trading Commission (the "CFTC"). *See also* Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010) (the "Dodd-Frank Act"), *available at* <http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf>.

Section 61 of the Investment Company Act makes section 18 of the Act applicable to BDCs, with certain modifications. *See infra* footnote 33 and accompanying text. Except as otherwise noted, or unless the context dictates otherwise, references in this release to section 18 of the Act should be read to refer also to section 61 with respect to BDCs.

⁴ Any staff guidance or no-action letters discussed in this release represent the views of the staff of the Division of Investment Management. They are not a rule, regulation, or statement of the Commission. Furthermore, the Commission has neither approved nor disapproved their content. Staff guidance has no legal force or effect; it does not alter or amend applicable law; and it creates no new or additional obligations for any person.

⁵ *See* Proposing Release, *supra* footnote 1. This proposal was a re-proposal of rules that the Commission proposed in 2015 to address funds' derivatives use, which included an earlier version of proposed rule 18f-4. *See* 2015 Proposing Release, *supra* footnote 1. In developing the 2019 re-proposal, the Commission considered the approximately 200 comment letters in response to the 2015 proposal, as well as subsequent staff engagement with large and small fund complexes and investor groups. *See also* Division of Economic and Risk Analysis, Memorandum re: Risk Adjustment and Haircut Schedules (Nov. 1, 2016), *available at* <https://www.sec.gov/comments/s7-24-15/s72415260.pdf> ("2016 DERA Memo").

framework. The Commission observed in proposing this rule that, in the absence of Commission rules and guidance that encompass the current broad range of funds' derivatives use, inconsistent industry practices have developed.⁶ The proposal was designed to respond to the concern that certain of these practices may not address investor protection concerns that underlie section 18's limitations on funds' issuance of senior securities. Specifically, certain fund practices can heighten leverage-related risks, such as the risk of potentially significant losses and increased fund volatility, that section 18 is designed to address. By standardizing the regulatory framework governing funds' derivatives use, the proposal also was designed to respond to the concern that funds' disparate practices could create an un-level competitive landscape and make it difficult for funds and the Commission to evaluate funds' compliance with section 18.⁷

The rules that the Commission proposed in 2019 would permit a fund to enter into derivatives transactions, notwithstanding the restrictions under section 18 of the Investment Company Act, subject to certain conditions. These proposed conditions include adopting a derivatives risk management program and complying with a limit on the amount of leverage-related risk that the fund may obtain, based on VaR. Under the proposed rule, a streamlined set of requirements would apply to funds that use derivatives in a limited way. The proposed rule would also permit a fund to enter into reverse repurchase agreements and similar financing transactions, as well as "unfunded commitments" to make certain loans or investments, subject to conditions tailored to these transactions. The proposal also included new reporting and recordkeeping requirements for funds using derivatives.

Certain registered investment companies that seek to provide leveraged or inverse exposure to an underlying index—including leveraged/inverse ETFs—would not have been subject to the limit on fund leverage risk under the 2019 proposal but instead would be subject to

⁶ See *infra* section I.B.3 (discussing the asset segregation practices funds have developed to "cover" their derivatives positions, which vary based on the type of derivatives transaction and with respect to the types of assets that funds segregate to cover their derivatives positions).

⁷ See Proposing Release, *supra* footnote 1, at n.9 and accompanying text (discussing funds that segregate the notional amount of physically-settled futures contracts, and those that segregate only the marked-to-marked obligation in respect of cash-settled futures, and the concern that these practices can result in differing treatment of arguably equivalent products).

alternative requirements. The 2019 proposal provided that sales of these funds also would be subject to new sales practices rules for brokers, dealers, and investment advisers that are registered with the Commission (collectively, the “proposed sales practices rules”).⁸ Finally, the proposal would amend rule 6c-11 under the Investment Company Act to allow leveraged/inverse ETFs that satisfy that rule’s conditions to operate without the expense and delay of obtaining an exemptive order.

The Commission received approximately 6,100 comment letters in response to the 2019 proposal. Of these comment letters, approximately 70 addressed proposed rule 18f-4, and the balance addressed the proposed sales practices rules. The majority of commenters who discussed proposed rule 18f-4 supported the Commission acting to provide an updated and more comprehensive approach to the regulation of funds’ use of derivatives.⁹ Commenters generally supported the proposal’s derivatives risk management program requirement and use of VaR to provide a limit on fund leverage risk, while suggesting certain modifications.¹⁰ Many commenters, however, expressed concerns with the proposed sales practices rules, and urged the Commission not to adopt these proposed rules (or to adopt alternative requirements designed to address the investor protection concerns underlying the proposed sales practices rules).¹¹

After consideration of the comments received, we are adopting rule 18f-4, with certain modifications. The final rule retains each of the elements of the proposed rule, as we continue to

⁸ As discussed in more detail in section II.G, the proposed sales practices rules would have covered transactions in “leveraged/inverse investment vehicles,” which include registered investment companies and certain exchange-listed commodity- or currency-based trusts or funds that seek, directly or indirectly, to provide investment returns that correspond to the performance of a market index by a specified multiple, or to provide investment returns that have an inverse relationship to the performance of a market index, over a predetermined period of time. For purposes of this release, we refer to leveraged, inverse, and leveraged inverse investment vehicles collectively as “leveraged/inverse.”

⁹ See, e.g., Comment Letter of the American Bar Association (May 2, 2020) (“ABA Comment Letter”); Comment Letter of Better Markets (Mar. 24, 2020) (“Better Markets Comment Letter”); Comment Letter of the U.S. Chamber of Commerce (“Chamber Comment Letter”); Comment Letter of Investment Company Institute (Apr. 20, 2020) (“ICI Comment Letter”); Comment Letter of New York City Bar (May 1, 2020) (“NYC Bar Comment Letter”).

¹⁰ See *infra* footnotes 125, 287 and accompanying text.

¹¹ See, e.g., *infra* footnotes 579-584 and accompanying text.

believe that these requirements provide important investor protections. We have, however, made modifications to the proposed rule to address the comments the Commission received. We are also adopting, with certain modifications, the proposed new reporting and recordkeeping requirements, as well as the proposed amendments to rule 6c-11. We are not, however, adopting the proposed sales practices rules. Instead, leveraged/inverse funds will generally be subject to rule 18f-4, like other funds that use derivatives. The enhanced standard of conduct for broker-dealers under Regulation Best Interest and the fiduciary obligations of registered investment advisers also apply to broker-dealer recommendations and advice from investment advisers in connection with leveraged/inverse funds, as well as with respect to the listed commodity pools following the same strategies that would have been subject to the proposed sales practices rules.¹² In addition, we have directed the staff to review the effectiveness of the existing regulatory requirements in protecting investors who invest in leveraged/inverse funds and other complex investment products.

A. Overview of Funds' Use of Derivatives

As we discussed in the Proposing Release, funds today use a variety of derivatives. These derivatives can reference a range of assets or metrics, such as: stocks, bonds, currencies, interest rates, market indexes, currency exchange rates, or other assets or interests. Examples of derivatives that funds commonly use include forwards, futures, swaps, and options. Derivatives are often characterized as either exchange-traded or over-the-counter ("OTC").¹³

¹² See Regulation Best Interest: The Broker-Dealer Standard of Conduct, Exchange Act Release No. 86031 (June 5, 2019) [84 FR 33318 (July 12, 2019)] ("Regulation Best Interest Adopting Release"). The proposed sales practices rules would have applied to certain exchange-listed commodity- or currency-based trusts or funds. See proposed rule 15l-2(d); proposed rule 211(h)-1(d). In this release we refer to these trusts or funds collectively as listed commodity pools.

¹³ Exchange-traded derivatives—such as futures, certain options, and options on futures—are standardized contracts traded on regulated exchanges. OTC derivatives—such as certain swaps, non-exchange-traded options, and combination products such as swaptions and forward swaps—are contracts that parties negotiate and enter into outside of an organized exchange. See Proposing Release, *supra* footnote 1, at n.14 and accompanying text. Unlike exchange-traded derivatives, OTC derivatives may be significantly customized and may not be cleared by a central clearing organization. Title VII of the Dodd-Frank Act provides a comprehensive framework for the regulation of the OTC swaps market. See *supra* footnote 3.

A common characteristic of most derivatives is that they involve leverage or the potential for leverage. The Commission has stated that “[l]everage exists when an investor achieves the right to a return on a capital base that exceeds the investment which he has personally contributed to the entity or instrument achieving a return.”¹⁴ Many fund derivatives transactions, such as futures, swaps, and written options, involve leverage or the potential for leverage because they enable the fund to magnify its gains and losses compared to the fund’s investment, while also obligating the fund to make a payment or deliver assets to a counterparty under specified conditions.¹⁵ Other derivatives transactions, such as purchased call options, provide the economic equivalent of leverage because they can magnify the fund’s exposure beyond its investment but do not impose a payment obligation on the fund beyond its investment.¹⁶

The Proposing Release considered, and commenters also discussed, how funds use derivatives both to obtain investment exposures as part of their investment strategies and to manage risk. A fund may use derivatives to gain, maintain, or reduce exposure to a market, sector, or security more quickly, and with lower transaction costs and portfolio disruption, than investing directly in the underlying securities.¹⁷ A fund also may use derivatives to obtain exposure to reference assets for which it may be difficult or impractical for the fund to make a direct investment, such as commodities.¹⁸ With respect to risk management, funds may employ derivatives to hedge currency, interest rate, credit, and other risks, as well as to hedge portfolio exposures.¹⁹ At the same time, a fund’s derivatives use may entail risks relating to, for example,

¹⁴ See Securities Trading Practices of Registered Investment Companies, Investment Company Act Release No. 10666 (Apr. 18, 1979) [44 FR 25128 (Apr. 27, 1979)], at n.5 (“Release 10666”).

¹⁵ The leverage created by such an arrangement is sometimes referred to as “indebtedness leverage.” See Proposing Release, *supra* footnote 1, at n.16.

¹⁶ This type of leverage is sometimes referred to as “economic leverage.” See *id.* at n.17.

¹⁷ See *id.* at n.18; see also, e.g., ICI Comment Letter; Comment Letter of SIFMA, Asset Management Group (Apr. 21, 2020) (“SIFMA AMG Comment Letter”).

¹⁸ See Proposing Release, *supra* footnote 1, at n.19; see also ICI Comment Letter.

¹⁹ See Proposing Release, *supra* footnote 1, at n.20; see also *infra* sections II.E.2.b and II.E.2.c.

leverage, markets, operations, liquidity (particularly with respect to complex OTC derivatives), and counterparties, as well as legal risks (*e.g.*, contract enforceability).²⁰

Section 18 is designed to limit the leverage a fund can obtain or incur through the issuance of senior securities. The Proposing Release discussed recent examples involving significant fund losses, which illustrate how a fund's use of derivatives may raise the investor protection concerns underlying section 18.²¹ While the losses suffered in the examples discussed in the 2019 proposal are extreme, and funds rarely suffer such large and rapid losses, these examples illustrate the rapid and extensive losses that can result from a fund's investments in derivatives absent effective derivatives risk management. In contrast, there are many other instances in which funds, by employing derivatives, have avoided losses, increased returns, and lowered risk.

The 2020 outbreak of coronavirus disease 2019 (COVID-19) and related effects on markets similarly have highlighted the importance of funds' derivatives risk management. Our staff has considered, and multiple commenters also discussed, the impact of COVID-19 both on

²⁰ See Proposing Release, *supra* footnote 1, at n.21.

²¹ See Proposing Release, *supra* footnote 1, at nn.22-23 and accompanying text (discussing the following settled actions: In the Matter of OppenheimerFunds, Inc. and OppenheimerFunds Distributor, Inc., Investment Company Act Release No. 30099 (June 6, 2012) (settled action); In the Matter of Claymore Advisors, LLC, Investment Company Act Release No. 30308 (Dec. 19, 2012) and In the Matter of Fiduciary Asset Management, LLC, Investment Company Act Release No. 30309 (Dec. 19, 2012) (settled actions); In the Matter of UBS Willow Management L.L.C. and UBS Fund Advisor L.L.C., Investment Company Act Release No. 31869 (Oct. 16, 2015) (settled action); In the Matter of Team Financial Asset Management, LLC, Team Financial Managers, Inc., and James L. Dailey, Investment Company Act Release No. 32951 (Dec. 22, 2017) (settled action); In the Matter of Mohammed Riad and Kevin Timothy Swanson, Investment Company Act Release No. 33338 (Dec. 21, 2018) (settled action); In the Matter of Top Fund Management, Inc. and Barry C. Ziskin, Investment Company Act Release No. 30315 (Dec. 21, 2012) (settled action)).

The Proposing Release also discussed the 2018 liquidation of the LJM Preservation and Growth Fund, which occurred after the fund—whose investment strategy involved purchasing and selling call and put options on the Standard & Poor's ("S&P") 500 Futures Index—sustained considerable losses in connection with a market volatility spike in February 2018. See *id.* at nn.24-25 and accompanying text.

Following the issuance of the Proposing Release, an additional settled action similarly illustrates substantial and rapid losses resulting from a fund's investment in derivatives. See In the Matter of Catalyst Capital Advisors, LLC and Jerry Szilagyi, Investment Advisers Act Release No. 5436 (Jan. 27, 2020) (settled action) (involving a mutual fund that advises and invests primarily in options on S&P 500 index futures contracts incurring losses of 20% of its net asset value—more than \$700 million—during the period December 2016 through February 2017).

funds' current derivatives risk management, as well as considerations relating to the Commission's 2019 proposal in light of market events stemming from this health crisis. The market volatility that followed the onset of this health crisis resulted in disruptions and challenges across asset classes.²² In the context of derivatives, this volatility resulted in trading, liquidity, and pricing disruptions, valuation challenges, counterparty issues, and issues relating to derivatives' underlying assets, all of which emphasize the significance of robust derivatives risk management.²³ Certain leveraged/inverse ETFs changed their investment objectives and strategies during this period.²⁴ On the other hand, commenters observed that the recent market volatility has shown the importance for funds to be able to use derivatives both to hedge risk and

²² See, e.g., Comment Letter of AQR Capital Management, LLC (Apr. 21, 2020) ("AQR Comment Letter I") (observing "extremely high levels of market volatility driven by the COVID-19 pandemic"); Comment Letter of AQR Capital Management, LLC (Sept. 29, 2020) ("AQR Comment Letter II") (discussing the impact and investment returns for certain alternative strategy funds at the onset of stressed market conditions related to the COVID-19 global health pandemic); see also ISDA COVID-19 Updates (July, 30, 2020), available at <https://www.isda.org/2020/03/13/covid-19-isda-update/> (providing updates on trading suspensions and regulatory emergency relief relating to COVID-19).

²³ See, e.g., ISDA and Greenwich Associates, The Impact of COVID-19 and Government Intervention on Swaps Market Liquidity (Q2 2020), available at <https://www.isda.org/a/YfbTE/The-Impact-of-COVID-19-on-Swaps-Market-Liquidity.pdf>; CFTC, COVID-19 Commission Action, available at <https://www.cftc.gov/coronavirus> (discussing CFTC actions designed to help facilitate orderly trading and liquidity in the U.S. derivatives markets in response to the COVID-19 pandemic); CFTC Letter No. 20-17, Staff Advisory on Risk Management and Market Integrity Under Current Market Conditions (May 13, 2020), available at <https://www.cftc.gov/coronavirus> (advisory issued to remind certain CFTC-regulated market participants that they are expected to prepare for the possibility that certain contracts may continue to experience "extreme market volatility, low liquidity and possibly negative pricing"); Derivatives close-outs: COVID-19—Challenges to the valuation of derivatives upon early termination, FTI Consulting (June 2020), available at <https://www.fticonsulting.com/~media/Files/emea--files/insights/articles/2020/jun/covid-19-derivatives-close-outs-crisis.pdf>; COVID-19 Update: The Impact of COVID-19 on Financial Contracts, The National Law Review Vol. X, Number 111 (Apr. 20, 2020) (discussing market volatility arising from the restrictions imposed to reduce the risk of spread of COVID-19, the impact of this volatility on existing contractual relationships, and illustrating practical issues that a counterparty to a financial contract might take into account using, as an example, a derivative transaction).

²⁴ In particular, one of the two ETF sponsors that currently relies on exemptive relief from the Commission permitting them to operate leveraged/inverse ETFs changed the objectives of a number of its funds, while also closing a number of its funds. See "Direxion Changes Objectives of Ten Leveraged Funds to Address Extreme Market Conditions, While Also Closing Eight Funds Due to Limited Interest Since Launch" (Mar. 24, 2020), available at <https://www.direxion.com/uploads/Change-in-Investment-Objectives-and-Strategies-of-Ten-Daily-Leveraged-and-Daily-Inverse-Leveraged-Funds.pdf> ("Direxion Press Release"); see also *infra* footnote 821 and accompanying text.

the flexibility to respond to quickly-changing market demands.²⁵ Some commenters suggested changes to certain aspects of proposed rule 18f-4 that reflect their experiences with this market volatility.²⁶ The rules we are adopting here take these considerations into account.

B. Derivatives and the Senior Securities Restrictions of the Investment Company Act

1. Requirements of Section 18

Section 18 of the Investment Company Act imposes various limits on the capital structure of funds, including, in part, by restricting the ability of funds to issue “senior securities.” Protecting investors against the potentially adverse effects of a fund’s issuance of senior securities, and in particular the risks associated with excessive leverage of investment companies, is a core purpose of the Investment Company Act.²⁷ “Senior security” is defined, in part, as “any bond, debenture, note, or similar obligation or instrument constituting a security and evidencing indebtedness.”²⁸

As discussed in the Proposing Release, Congress’ concerns underlying the limits in section 18 focused on: (1) excessive borrowing and the issuance of excessive amounts of senior securities by funds when these activities increase unduly the speculative character of funds’ junior securities; (2) funds operating without adequate assets and reserves; and (3) potential

²⁵ See, e.g., Comment Letter of BlackRock, Inc. (Apr. 22, 2020) (“BlackRock Comment Letter”); Comment Letter of International Swaps and Derivatives Association, Inc. (Apr. 24, 2020) (“ISDA Comment Letter”); see also, e.g., PIMCO: Taxonomy of Crisis, presentation to Commission’s Asset Management Advisory Committee on May 27, 2020, available at <https://www.sec.gov/files/marc-seidner-pimco.pdf>.

²⁶ See, e.g., AQR Comment Letter I; BlackRock Comment Letter; Comment Letter of Capital Research and Management Company (Apr. 21, 2020) (“Capital Group Comment Letter”).

²⁷ See, e.g., sections 1(b)(7), 1(b)(8), 18(a), and 18(f) of the Investment Company Act; see also *Provisions Of The Proposed Bill Related To Capital Structure (Sections 18, 19(B), And 21(C))*, Introduced by L.M.C Smith, Associate Counsel, Investment Trust Study, Securities and Exchange Commission, *Hearings on S.3580 Before a Subcommittee of the Senate Committee on Banking and Currency*, 76th Congress, 3rd session (1940), at 1028 (“Senate Hearings”); see also Proposing Release, *supra* footnote 1, at n.26.

²⁸ See section 18(g) of the Investment Company Act. The definition of “senior security” in section 18(g) also includes “any stock of a class having priority over any other class as to the distribution of assets or payment of dividends” and excludes certain limited temporary borrowings.

abuse of the purchasers of senior securities.²⁹ To address these concerns, section 18 prohibits an open-end fund from issuing or selling any “senior security,” other than borrowing from a bank (subject to a requirement to maintain 300% “asset coverage”).³⁰ Section 18 similarly prohibits a closed-end fund from issuing or selling any “senior security [that] represents an indebtedness” unless it has at least 300% “asset coverage,” although closed-end funds’ ability to issue senior securities representing indebtedness is not limited to bank borrowings.³¹ Closed-end funds also may issue or sell senior securities that are a stock, subject to the limitations of section 18 (including that these funds must have asset coverage of at least 200% immediately after such issuance or sale).³² The Investment Company Act also subjects BDCs to the limitations of section 18 to the same extent as registered closed-end funds, except the applicable asset coverage amount for any senior security representing indebtedness is 200% (and can be decreased to 150% under certain circumstances).³³

2. Investment Company Act Release 10666 and the Status of Derivatives Under Section 18

Investment Company Act Release 10666

²⁹ See Proposing Release, *supra* footnote 1, at n.28 and accompanying text (citing to discussion of each of these enumerated concerns in certain Investment Company Act provisions, Release 10666, *supra* footnote 14, and Senate Hearings, *supra* footnote 27).

³⁰ See section 18(f)(1) of the Investment Company Act. “Asset coverage” of a class of senior securities representing indebtedness of an issuer generally is defined in section 18(h) of the Investment Company Act as “the ratio which the value of the total assets of such issuer, less all liabilities and indebtedness not represented by senior securities, bears to the aggregate amount of senior securities representing indebtedness of such issuer.” Take, for example, an open-end fund with \$100 in assets and with no liabilities or senior securities outstanding. The fund could, while maintaining the required coverage of 300% of the value of its assets, borrow an additional \$50 from a bank. The \$50 in borrowings would represent one-third of the fund’s \$150 in total assets, measured after the borrowing (or 50% of the fund’s \$100 net assets).

³¹ See section 18(a)(1) of the Investment Company Act.

³² See section 18(a)(2) of the Investment Company Act.

³³ See section 61(a)(1) of the Investment Company Act. BDCs, like registered closed-end funds, also may issue a senior security that is a stock (e.g., preferred stock), subject to limitations in section 18. See sections 18(a)(2) and 61(a)(1) of the Investment Company Act. In 2018, Congress passed the Small Business Credit Availability Act, which, among other things, modified the statutory asset coverage requirements applicable to BDCs (permitting BDCs that meet certain specified conditions to elect to decrease their effective asset coverage requirement from 200% to 150%). See section 802 of the Small Business Credit Availability Act, Pub. L. No. 115-141, 132 Stat. 348 (2018).

As discussed in the Proposing Release, the Commission considered the application of section 18's restrictions on the issuance of senior securities to certain transactions—reverse repurchase agreements, firm commitment agreements, and standby commitment agreements—in a 1979 General Statement of Policy (Release 10666).³⁴ The Proposing Release discussed the Commission's conclusion that these agreements fall within the “functional meaning of the term ‘evidence of indebtedness’ for purposes of Section 18 of the Investment Company Act.”³⁵ The Commission stated in Release 10666 that, for purposes of section 18, “evidence of indebtedness” would include “all contractual obligations to pay in the future for consideration presently received.”³⁶ The Commission recognized that, while section 18 would generally prohibit open-end funds' use of reverse repurchase agreements, firm commitment agreements, and standby commitment agreements, Release 10666 nonetheless permitted funds to use these and similar arrangements subject to certain constraints.

These constraints relied on funds' use of “segregated accounts” to “cover” senior securities, which “if properly created and maintained, would limit the investment company's risk of loss.”³⁷ The Commission also stated that the segregated account functions as “a practical limit on the amount of leverage which the investment company may undertake and on the potential increase in the speculative character of its outstanding common stock” and that it “[would] assure the availability of adequate funds to meet the obligations arising from such activities.”³⁸ The Commission stated that its expressed views were not limited to the particular trading practices discussed, emphasizing that Release 10666 discussed certain securities trading practices as examples and that the Commission sought to address the implications of all comparable trading practices that could similarly affect funds' capital structures.³⁹

³⁴ See Release 10666, *supra* footnote 14.

³⁵ See Proposing Release, *supra* footnote 1, at n.34 and accompanying and following text.

³⁶ See *id.*

³⁷ See Proposing Release, *supra* footnote 1, at n.35 and accompanying text.

³⁸ See *id.* at n.36 and accompanying text.

³⁹ See *id.* at n.37 and accompanying text. The Commission in Release 10666 stated that although it

Transactions Involving Senior Securities for Purposes of Section 18

We continue to view the transactions described in Release 10666 as falling within the functional meaning of the term “evidence of indebtedness,” for purposes of section 18. These transactions, as well as short sales of securities for which the staff initially developed the segregated account approach, all impose on a fund a contractual obligation under which the fund is or may be required to pay or deliver assets in the future to a counterparty.⁴⁰ These transactions therefore involve the issuance of a senior security for purposes of section 18.⁴¹

We also continue to apply the same analysis to all derivatives transactions that create future payment obligations.⁴² As was the case for trading practices that Release 10666 describes, where the fund has entered into a derivatives transaction and has such a future payment obligation, we believe that such a transaction involves an evidence of indebtedness that is a senior security for purposes of section 18.⁴³

Most commenters were silent on the Commission’s interpretation. Some commenters, however, raised questions about whether all of the transactions covered in the rule’s definition of “derivatives transaction” involve senior securities. For example, some of these commenters stated that derivatives such as swaps, options, and futures are not generally structured as

was expressing its views about the particular trading practices discussed in that release, its views were not limited to those trading practices, in that the Commission sought to “address generally the possible economic effects and legal implications of all comparable trading practices which may affect the capital structure of investment companies in a manner analogous to the securities trading practices specifically discussed in Release 10666.”

⁴⁰ See *id.* at n.38 and accompanying text.

⁴¹ See *id.* at n.38 and accompanying text (citing Release 10666, *supra* footnote 14, at “The Agreements as Securities” discussion and noting that the Investment Company Act’s definition of the term “security” is broader than the term’s definition in other federal securities laws); see also section 18(g) (defining the term “senior security,” in part, as “any bond, debenture, note, or similar obligation or instrument constituting a security and evidencing indebtedness”).

⁴² This is the case where the fund has a contractual obligation to pay or deliver cash or other assets to a counterparty in the future, either during the life of the instrument or at maturity or early termination. These payments—which may include payments of cash, or delivery of other assets—may occur as margin, as settlement payments, or otherwise.

⁴³ See Proposing Release, *supra* footnote 1, at n.41 and accompanying text (stating that, as the Commission explained in Release 10666, the Commission continues to believe that an evidence of indebtedness, for purposes of section 18, includes not only a firm and un-contingent obligation, but also a contingent obligation, such as a standby commitment or a “put” (or call) option sold by a fund).

“borrowings” and therefore questioned whether these derivatives represent “indebtedness.”⁴⁴

One of these commenters stated that the reverse repurchase agreements, firm commitment agreements, and standby commitment agreements that Release 10666 addresses “can fairly be characterized as ‘evidence of indebtedness,’” but questioned whether those types of arrangements are derivatives “in today’s parlance” and stated that Release 10666’s discussion of those arrangements does not indicate that “today’s derivatives—swaps, options, futures—represent ‘indebtedness.’”⁴⁵ Certain commenters also questioned whether a fund “issues” senior securities when it engages in derivatives transactions, and some furthermore expressed the view that derivatives transactions do not involve senior securities under section 18.⁴⁶

As discussed in the Proposing Release, we continue to believe that the express scope of section 18, and the broad definition of the term “senior security” in section 18, support the interpretation that a derivatives transaction that creates a future payment obligation involves an evidence of indebtedness that is a senior security for purposes of section 18.⁴⁷ Section 18 defines the term “senior security” broadly to include instruments and transactions that other provisions of the federal securities laws might not otherwise consider to be securities.⁴⁸ For example, section 18(f)(1) generally prohibits an open-end fund from issuing or selling any senior security

⁴⁴ See, e.g., Comment Letter of Nuveen Funds Advisors, LLC (Apr. 1, 2020) (“Nuveen Comment Letter”); Comment Letter of Rafferty Asset Management and Rafferty Capital Markets, LLC, including on behalf of the separate series of Direxion Funds and Direxion Shares ETF Trust (Mar. 31, 2020) (“Direxion Comment Letter”); Comment Letter of ProShares (Mar. 28, 2016) (“ProShares Comment Letter”).

⁴⁵ See Nuveen Comment Letter; see also Direxion Comment Letter (stating that total return swap contracts should not qualify as “evidencing indebtedness” because they are not the type of long-term debt securities issued by a fund that Congress intended to be considered part of the fund’s capital structure and thus subject to regulation under section 18, and stating also that the exception in section 18(f) for bank borrowings does not imply that all borrowings constitute “senior securities”); ProShares Comment Letter (arguing that derivatives such as options and futures are not “evidence of indebtedness”).

⁴⁶ See, e.g., Comment Letter of James Angel, Associate Professor of Finance Georgetown University (Feb. 24, 2020); Comment Letter of Competitive Enterprise Institute (Apr. 30, 2020); Direxion Comment Letter; ProShares Comment Letter.

⁴⁷ See Proposing Release, *supra* footnote 1, at paragraph accompanying nn.42-44.

⁴⁸ Consistent with Release 10666, and as the Commission stated in the Proposing Release (as well as in the 2015 Proposing Release), we are only expressing our views in this release concerning the scope of the term “senior security” in section 18 of the Investment Company Act. See also section 12(a) of the Investment Company Act (prohibiting funds from engaging in short sales in contravention of Commission rules or orders).

“except [that the fund] shall be permitted to borrow from any bank.”⁴⁹ This statutory permission to engage in a specific borrowing makes clear that such borrowings are senior securities, which otherwise section 18 would prohibit absent this specific permission.⁵⁰

In addition to continuing to believe that section 18’s scope supports the interpretation that a derivatives transaction creating a future payment obligation involves an evidence of indebtedness that is a senior security for purposes of section 18, we continue to believe that this interpretation is consistent with the fundamental policy and purposes underlying the Investment Company Act expressed in sections 1(b)(7) and 1(b)(8) of the Act.⁵¹ These respectively declare that “the national public interest and the interest of investors are adversely affected” when funds “by excessive borrowing and the issuance of excessive amounts of senior securities increase unduly the speculative character” of securities issued to common shareholders and when funds “operate without adequate assets or reserves.” The Commission emphasized these concerns in Release 10666, and we continue to believe that the prohibitions and restrictions under the senior security provisions of section 18 should “function as a practical limit on the amount of leverage which the investment company may undertake and on the potential increase in the speculative

⁴⁹ Section 18(c)(2) similarly treats all promissory notes or evidences of indebtedness issued in consideration of any loan as senior securities except as section 18 otherwise specifically provides.

⁵⁰ The Commission similarly observed in Release 10666 that section 18(f)(1), “by implication, treats all borrowings as senior securities,” and that “[s]ection 18(f)(1) of the Act prohibits such borrowings unless entered into with banks and only if there is 300% asset coverage on all borrowings of the investment company.” *See* Release 10666, *supra* footnote 14, at “Reverse Repurchase Agreements” discussion.

⁵¹ Several commenters discussed the Commission’s authority to adopt rules based on the policy considerations reflected in section 1 of the Act. *See, e.g.*, Direxion Comment Letter; ProShares Comment Letter. The authority under which we are adopting rules today is set forth in section VI of this release and includes, among other provisions, section 6(c) of the Act. That section provides that “The Commission, by rules and regulations upon its own motion, or by order upon application, may conditionally or unconditionally exempt any person, security, or transactions . . . from any provision or provisions of this title or of any rule or regulation thereunder, if and to the extent that such exemption is necessary or appropriate in the public interest and consistent with the protection of investors” As discussed in the paragraph accompanying this footnote, the fundamental statutory policy and purposes underlying the Investment Company Act, as expressed in section 1(b) of the Act, continue to inform our interpretation of the scope of the term “senior security” in section 18. This also separately informs our consideration of appropriate conditions for the exemption that rule 18f-4 provides, as we discuss in sections II.B-II.F *infra*.

character of its outstanding common stock” and that funds should not “operate without adequate assets or reserves.”⁵²

Funds’ use of derivatives, like the trading practices the Commission addressed in Release 10666, may raise the undue speculation and asset sufficiency concerns in section 1(b).⁵³ First, funds’ obtaining leverage (or potential for leverage) through derivatives may raise the Investment Company Act’s undue speculation concern because a fund may experience gains and losses that substantially exceed the fund’s investment, and also may incur a conditional or unconditional obligation to make a payment or deliver assets to a counterparty.⁵⁴ Not viewing derivatives that impose a future payment obligation on the fund as involving senior securities, subject to appropriate limits under section 18, would frustrate the concerns underlying section

⁵² See Release 10666, *supra* footnote 14, at “Segregated Account” discussion.

⁵³ As the Commission stated in Release 10666, leveraging an investment company’s portfolio through the issuance of senior securities “magnifies the potential for gain or loss on monies invested and therefore results in an increase in the speculative character of the investment company’s outstanding securities” and “leveraging without any significant limitation” was identified “as one of the major abuses of investment companies prior to the passage of the Act by Congress.” *Id.*

⁵⁴ See, e.g., *The Report of the Task Force on Investment Company Use of Derivatives and Leverage*, Committee on Federal Regulation of Securities, ABA Section of Business Law (July 6, 2010), at 8 (“2010 ABA Derivatives Report”) (stating that “[f]utures contracts, forward contracts, written options and swaps can produce a leveraging effect on a fund’s portfolio” because “for a relatively small up-front payment made by a fund (or no up-front payment, in the case with many swaps and written options), the fund contractually obligates itself to one or more potential future payments until the contract terminates or expires”; noting, for example, that an “[interest rate] swap presents the possibility that the fund will be required to make payments out of its assets” and that “[t]he same possibility exists when a fund writes puts and calls, purchases short and long futures and forwards, and buys or sells credit protection through [credit default swaps]”).

18.⁵⁵ Some commenters mentioned undue speculation concerns underlying section 18 and discussed ways in which the Commission’s 2019 proposal would address these concerns.⁵⁶

Second, with respect to the Investment Company Act’s asset sufficiency concern, a fund’s use of derivatives with future payment obligations also may raise concerns regarding the fund’s ability to meet those obligations. Many fund derivatives investments, such as futures contracts, swaps, and written options, pose a risk of loss that can result in payment obligations owed to the fund’s counterparties.⁵⁷ Losses on derivatives therefore can result in counterparty payment obligations that directly affect the capital structure of a fund and the relative rights of the fund’s counterparties and shareholders. These losses and payment obligations also can force

⁵⁵ One commenter on the 2011 Concept Release made this point directly. *See* Comment Letter of Stephen A. Keen on the 2011 Concept Release (Nov. 8, 2011) (File No. S7-33-11), at 3 (“Keen Concept Release Comment Letter”) (“If permitted without limitation, derivative contracts can pose all of the concerns that section 18 was intended to address with respect to borrowings and the issuance of senior securities by investment companies.”); *see also, e.g.*, Comment Letter of the Investment Company Institute on the 2011 Concept Release (Nov. 7, 2011) (File No. S7-33-11) (“ICI Concept Release Comment Letter”), at 8 (“The Act is thus designed to regulate the degree to which a fund issues any form of debt—including contractual obligations that could require a fund to make payments in the future.”). The Commission similarly noted in Release 10666 that, given the potential for reverse repurchase agreements to be used for leveraging and their ability to magnify the risk of investing in a fund, “one of the important policies underlying section 18 would be rendered substantially nugatory” if funds’ use of reverse repurchase agreements were not subject to limitation. *See* Proposing Release, *supra* footnote 1, n.49.

⁵⁶ *See, e.g.*, AQR Comment Letter I (“For a fund engaging in significant or complex derivative usage, the key to curbing excessive borrowing and undue speculation lies in implementing an effective risk management program.”); Capital Group Comment Letter (“We believe the Proposal is an effective way to address the investor protection concerns underlying Section 18 of the Investment Company Act of 1940 . . . In particular, we believe that creating leverage limits that constrain economic risk, coupled with a derivatives risk management program, is a better way to constrain leverage and prevent undue speculation by funds than limits based on the aggregate gross notional exposure of a fund’s derivative transactions, as proposed in 2015.”); Comment Letter of Consumer Federation of America (Mar. 30, 2020) (“CFA Comment Letter”) (“Congress’ findings and declaration of policy underlying Section 18 make clear that Congress was concerned with the potential for investment companies, through excessive borrowing, to engage in undue speculation and operate without sufficient assets to cover potential losses . . . While Section 18 does not explicitly refer to funds’ use of derivatives, the concerns are the same.”); ICI Comment Letter (“We fully support the Commission’s goal of addressing the investor protection concerns underlying Section 18 of the Investment Company Act of 1940, and the repropose rule is an effective way to achieve that goal. In particular, the leverage limits coupled with elements of the derivatives risk management program, including required stress testing, will restrict the amount of exposure to economic risk that a fund could take when investing in derivatives. Creating leverage limits that confine economic risk is a far better way to addresses Section 18’s “undue speculation” concerns than limits based solely on the aggregate gross notional exposure (“GNE”) of a fund’s derivatives transactions, as proposed in 2015.”).

⁵⁷ Some derivatives transactions, like physically-settled futures and forwards, can require the fund to deliver the underlying reference assets regardless of whether the fund experiences losses on the transaction.

a fund’s adviser to sell the fund’s investments to meet its obligations. When a fund uses derivatives to leverage its portfolio, this can amplify the risk of a fund having to sell its investments, potentially generating additional losses for the fund.⁵⁸ In an extreme situation, a fund could default on its payment obligations.⁵⁹ Some commenters mentioned asset sufficiency concerns underlying section 18 and discussed ways in which the Commission’s 2019 proposal would address these concerns.⁶⁰

Applying rule 18f-4 to derivatives transactions—including swaps, options, and futures—also is consistent with the Commission’s views in Release 10666. As discussed above, in Release 10666, the Commission stated that its expressed views were not limited to the particular trading practices discussed, emphasizing that Release 10666 discussed certain securities trading practices as examples and that the Commission sought to address the implications of all comparable trading practices that could similarly affect funds’ capital structures.⁶¹ The Commission observed in Release 10666 that firm commitment agreements are also known as

⁵⁸ See, e.g., Markus K. Brunnermeier & Lasse Heje Pedersen, *Market Liquidity and Funding Liquidity*, 22 *The Review of Financial Studies* 6, 2201-2238 (June 2009), *available at* <https://www.princeton.edu/~markus/research/papers/liquidity.pdf> (providing both empirical support as well as a theoretical foundation for how short-term leverage obtained through borrowings or derivative positions can result in funds and other financial intermediaries becoming vulnerable to tighter funding conditions and increased margins, specifically during economic downturns (as in the recent financial crisis), thus potentially increasing the need for the fund or intermediary to de-lever and sell portfolio assets at a loss).

⁵⁹ See ICI Concept Release Comment Letter, *supra* footnote 55, at 11 (noting that, “[h]ypothetically, in an extreme scenario, a fund that used derivatives heavily and segregated most of its liquid assets to cover its obligation on a pure mark-to-market basis could potentially find itself with insufficient liquid assets to cover its derivative positions”); see also Aditum Comment Letter (discussing asset sufficiency concerns in the context of unfunded commitment agreements and the recent market disruption associated with COVID-19).

⁶⁰ See, e.g., Better Markets Comment Letter; Comment Letter of CBOE (May 1, 2020) (“CBOE Comment Letter”); Comment Letter of Dechert LLP (Mar. 24, 2020) (“Dechert Comment Letter I”); Comment Letter of Invesco, Ltd. (Mar. 24, 2020) (“Invesco Comment Letter”) (“Invesco agrees with the Commission that registered funds using derivatives transactions should be subject to a regulatory framework that requires them and their advisers to manage attendant risks, including the risk of leverage that implicates the “undue speculation” and “asset sufficiency” concerns expressed in Sections 1(b)(7) and 1(b)(8), respectively, of the Investment Company Act . . . We believe the Proposed Rule will aptly address the investor protection purposes and concerns that underlie Section 18 . . .”); Comment Letter of Vanguard Group, Inc. (Apr. 23, 2020) (“Vanguard Comment Letter”) (“We agree with the Commission’s assessment that the proposed requirements for a derivatives risk management program, including VaR and stress testing, would appropriately address the asset sufficiency concerns underlying Section 18 with respect to derivatives use.”).

⁶¹ See *supra* footnote 39.

forward contracts, and that standby commitment agreements involve, in economic reality, the issuance and sale by the investment company of a “put.”⁶² Both forward and futures contracts involve the agreement to buy or sell an underlying reference asset at a set price in the future, and a swap contract is structurally the equivalent of a series of forward contracts.⁶³ Moreover, derivatives transactions as defined in the final rule generally involve a synthetic borrowing, in that they provide a market exposure exceeding the fund’s investment while also involving a future payment obligation.⁶⁴

3. Need for Updated Regulatory Framework

Market and Industry Developments Following Release 10666

Following Release 10666, Commission staff issued more than thirty no-action letters to funds concerning the maintenance of segregated accounts or otherwise “covering” their obligations in connection with various transactions otherwise restricted by section 18.⁶⁵ Funds have developed certain general asset segregation practices to cover their derivatives positions, considering at least in part the staff’s no-action letters and guidance, which vary based on the

⁶² See Release 10666, *supra* footnote 14, at nn.10-12 and accompanying text, and at “Standby Commitment Agreements.”

⁶³ See e.g. John C. Hull, *Options, Futures, and Other Derivatives*, Prentice Hall, 7th Edition (2008) at 161.

⁶⁴ For example, one commenter on the 2011 Concept Release observed that “a fund’s purchase of an equity total return swap produces an exposure and economic return substantially equal to the exposure and economic return a fund could achieve by borrowing money from the counterparty in order to purchase the equities that are reference assets.” Comment Letter of BlackRock on the 2011 Concept Release (Nov. 4, 2011) (File No. S7-33-11).

⁶⁵ See Proposing Release, *supra* footnote 1, at paragraph accompanying n.53 (stating that, in these letters and through other staff guidance, staff addressed questions regarding the application of Release 10666 to various types of derivatives and other transactions); see also Concept Release, *supra* footnote 1, at section I.

type of derivatives transaction.⁶⁶ Funds also segregate a broader range of assets to cover their derivatives positions than those the Commission identified in Release 10666.⁶⁷

As a result of these asset segregation practices, funds' derivatives use—and thus funds' potential leverage through derivatives transactions—does not appear to be subject to a practical limit as the Commission contemplated in Release 10666. Funds' mark-to-market liability often does not reflect the full investment exposure associated with their derivatives positions.⁶⁸ As a result, a fund that segregates only the mark-to-market liability could theoretically incur virtually unlimited investment leverage.⁶⁹

Furthermore, as discussed in the Proposing Release, funds' current asset segregation practices also may not assure the availability of adequate assets to meet funds' derivatives obligations, on account of both the amount and types of assets that funds may segregate.⁷⁰ When a fund's derivatives payment obligations are substantial relative to the fund's liquid assets, the

⁶⁶ See Proposing Release, *supra* footnote 1, at paragraph accompanying n.54 (discussing funds' practices for segregating an amount equal to the full amount of the fund's potential obligation under the contract, or the full market value of the underlying reference asset for the derivative ("notional amount segregation") for certain derivatives, and funds practices for segregating an amount equal to the fund's daily mark-to-market liability, if any ("mark-to-market segregation") for certain cash settled-derivatives).

⁶⁷ See *id.* at paragraph accompanying nn.56-57 (discussing Release 10666's statement that assets eligible to be included in segregated accounts should be "liquid assets" such as cash, U.S. government securities, or other appropriate high-grade debt obligations, and a subsequent staff no-action letter stating that the staff would not recommend enforcement action if a fund were to segregate any liquid asset, including equity securities and non-investment grade debt securities); see also Merrill Lynch Asset Management, L.P., SEC Staff No-Action Letter (July 2, 1996).

⁶⁸ For example, for derivatives where there is no loss in a given day, a fund applying the mark-to-market approach might not segregate any assets. This may be the case, for example, because the derivative is currently in a gain position, or because the derivative has a market value of zero (as will generally be the case at the inception of a transaction). The fund may, however, still be required to post collateral to comply with other regulatory or contractual requirements.

⁶⁹ See Proposing Release, *supra* footnote 1, at n.59; see also BlackRock Comment Letter ("We agree with the Commission's view that the use of derivatives should not be unlimited or unregulated."); Comment Letter of J.P. Morgan Asset Management (Mar. 24, 2020) ("J.P. Morgan Comment Letter") ("Evolving market practices, together with staff guidance over the years, have enabled funds to segregate large portions of their portfolios, while using mark-to-market exposure amounts for many instruments. This approach to asset segregation could result in a fund obtaining a significant degree of leverage.").

⁷⁰ See Proposing Release, *supra* footnote 1, at nn.60-62 and accompanying text (discussing: (1) funds' segregation of assets that only reflect losses that would occur as a result of transaction termination; and (2) funds' practices of segregating any liquid asset, rather than the more narrow range of high-quality assets that the Commission described in Release 10666).

fund may be forced to sell portfolio securities to meet its derivatives payment obligations. These forced sales could occur during stressed market conditions, including at times when prudent management could advise against such liquidation.⁷¹

Regulatory Framework to Address Concerns Underlying Section 18 in Light of Current Fund Practices

As a result of market and industry developments over the past four decades, funds' current practices regarding derivatives use may not address the undue speculation and asset sufficiency concerns underlying section 18.⁷² Additionally, a fund's derivatives use may involve risks that can result in significant losses to a fund.⁷³ Accordingly, we continue to believe that it is appropriate for funds to address these risks and considerations relating to their derivatives use. Nevertheless, we also recognize the valuable role derivatives can play in helping funds to achieve their objectives efficiently or manage their investment risks.

We therefore are requiring funds that use derivatives in a more than limited way to adopt and implement formalized programs, which must cover certain elements but otherwise will be tailored to manage the risks that funds' derivatives use may pose. In addition, the framework we are adopting addresses our concern that funds today are not subject to a practical limit on potential leverage that they may obtain through derivatives transactions.

We believe that a comprehensive approach to regulating funds' derivatives use also will help address potential adverse results from funds' current, disparate asset segregation practices. The development of staff guidance and industry practice on an instrument-by-instrument basis, together with growth in the volume and complexity of derivatives markets over past decades, has resulted in situations in which different funds may treat the same kind of derivative differently,

⁷¹ See *id.* at n.62 and accompanying text.

⁷² See Proposing Release, *supra* footnote 1, at n.63 and accompanying text; see also *supra* footnotes 56 and 60 and accompanying text (discussing, respectively, commenters' statements regarding undue speculation and asset sufficiency concerns underlying section 18 and their discussion of ways in which the Commission's 2019 proposal would address these concerns).

⁷³ See *supra* paragraph accompanying footnote 21.

based on their own view of our staff's guidance or observation of industry practice. This may unfairly disadvantage some funds.⁷⁴

The lack of comprehensive guidance also makes it difficult for funds and our staff to evaluate and inspect for funds' compliance with section 18 of the Investment Company Act. Moreover, where there is no specific guidance, or where the application of existing guidance is unclear or applied inconsistently, funds may take approaches that involve an extensive use of derivatives and may not address the purposes and concerns underlying section 18. The new framework that we are adopting will replace the current, multi-part guidance framework with a unitary rule. This will level-set the regulation of funds' derivatives use in light of the breadth of fund strategies and the variety of ways that funds use derivatives today.

C. Overview of the Final Rule

We are adopting rule 18f-4 to provide an updated, comprehensive approach to the regulation of funds' use of derivatives and certain other transactions that the rule addresses. The amendments we are adopting to Forms N-PORT, N-LIQUID (which we are re-titling as "Form N-RN"), and N-CEN will enhance the Commission's ability to oversee funds' use of and compliance with the rules, and will provide the Commission, fund investors, and other market participants additional information regarding funds' use of derivatives.

Rule 18f-4 will permit a fund to enter into derivatives transactions, notwithstanding the prohibitions and restrictions on the issuance of senior securities under section 18 of the Investment Company Act, subject to the following conditions.⁷⁵ These conditions are designed to address the undue speculation and asset sufficiency concerns underlying section 18, and they support the Commission's conclusion that the exemptions that the rule provides are in the public

⁷⁴ See Proposing Release, *supra* footnote 1, at n.65 and accompanying text.

⁷⁵ See rule 18f-4(b) and (d). Rule 18f-4(b) provides an exemption for funds' derivatives transactions from sections 18(a)(1), 18(c), 18(f)(1), and 61 of the Investment Company Act. See *supra* section I.B.1 of this release (providing an overview of the requirements of section 18). Because the conditions provide a tailored set of requirements for derivatives transactions, the rule also provides that a fund's derivatives transactions will not be considered for purposes of computing asset coverage under section 18(h). See *infra* section II.K.

interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

- *Derivatives risk management program.* The rule will generally require a fund to adopt a written derivatives risk management program with risk guidelines that must cover certain elements, but that will otherwise be tailored based on how the fund's use of derivatives may affect its investment portfolio and overall risk profile. The program also will include stress testing, backtesting, internal reporting and escalation, and program review elements. The program will institute a standardized risk management framework for funds that engage in more than a limited amount of derivatives transactions, while allowing principles-based tailoring to the fund's particular risks. The program requirement that we are adopting retains the same framework and elements as the proposed program requirement.
- *Limit on fund leverage risk.* The rule will generally require funds when engaging in derivatives transactions to comply with an outer limit on fund leverage risk based on VaR. This outer limit is based on a relative VaR test that compares the fund's VaR to the VaR of a "designated reference portfolio" for that fund. Under the final rule, a fund generally can use either an index that meets certain requirements, or the fund's own securities portfolio (excluding derivatives transactions), as its designated reference portfolio. If the fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, the fund would be required to comply with an absolute VaR test. In light of our consideration of comments received, the requirements we are adopting incorporate certain changes to the proposed VaR test. These include permitting a fund to use its securities portfolio as the reference portfolio for purposes of the relative VaR test (instead of requiring a fund to compare its VaR against the VaR of a designated index for the relative VaR test), and increasing the relative and absolute VaR limits from 150% and 15% to 200% and 20%, respectively.

- Board oversight and reporting.* The rule will require a fund's board of directors to approve the fund's designation of a derivatives risk manager, who will be responsible for administering the fund's derivatives risk management program. The fund's derivatives risk manager will have to report to the fund's board on the derivatives risk management program's implementation and effectiveness and the results of the fund's stress testing. The derivatives risk manager will have a direct reporting line to the fund's board. We are adopting these requirements substantially as proposed, with minor changes to clarify the requirements and conform to changes in other rule provisions.
- Exception for limited derivatives users.* The rule will except limited derivatives users from the derivatives risk management program requirement, the VaR-based limit on fund leverage risk, and the related board oversight and reporting requirements, provided that the fund adopts and implements written policies and procedures reasonably designed to manage the fund's derivatives risks. This exception will be available to a fund that limits its derivatives exposure to 10% of its net assets. In a change from the proposal, in calculating derivatives exposure to determine eligibility for the exception, a fund will be permitted to exclude derivatives transactions that it uses to hedge certain currency and interest rate risks. The exception also includes, in a change from the proposal, provisions for a fund with derivatives exposure that exceeds the 10% threshold. If the fund does not reduce its exposure within five business days, the fund's adviser must provide a written report to the fund's board informing it whether the adviser intends to reduce the exposure promptly, but within no more than 30 days, or put in place a derivatives risk management program and comply with the VaR-based limit on fund leverage risk as soon as reasonably practicable.
- Alternative requirements for certain leveraged/inverse funds.* After considering comments on the proposed sales practices rules, we have determined not to adopt them at this time. Leveraged/inverse funds instead will generally be subject to rule 18f-4 like other funds, including the requirement to comply with the VaR-based limit on fund

leverage risk. This will effectively limit leveraged/inverse funds' targeted daily return to 200% of the return (or inverse of the return) of the fund's underlying index. The final rule also provides an exception from the VaR-based limit for leveraged/inverse funds in operation as of October 28, 2020 that seek an investment return above 200% of the return (or inverse of the return) of the fund's underlying index and satisfy certain conditions and the other requirements of rule 18f-4. The conditions to this exception are designed to allow these funds to continue to operate in their current form, but prohibit them from changing their index or increasing the amount of their leveraged or inverse market exposure. We believe that the enhanced standard of conduct for broker-dealers under Regulation Best Interest and the fiduciary obligations of registered investment advisers help address some of the sales practice concerns that leveraged/inverse funds and listed commodity pools following the same strategies may raise, in the context of recommended transactions and transactions occurring in an advisory relationship. To help ensure that our regulatory framework addresses all potential investor protection concerns associated with complex financial products, including those that use leveraged/inverse strategies and those that are available to investors who do not receive either recommendations subject to Regulation Best Interest or investment advice subject to an adviser's fiduciary obligation, we have directed the staff to begin a review. This review will assess the effectiveness of the existing regulatory requirements in protecting investors—particularly those with self-directed accounts—who invest in leveraged/inverse products and other complex investment products.

- *Recordkeeping.* The final rule will require a fund to adhere to recordkeeping requirements that are designed to provide the Commission, and the fund's board of directors and compliance personnel, the ability to evaluate the fund's compliance with the rule's requirements. We are adopting these provisions largely as proposed, with certain conforming changes in light of modifications to other aspects of the final rule.

Final rule 18f-4 also will permit funds to enter into reverse repurchase agreements and similar financing transactions, as well as “unfunded commitments” to make certain loans or investments, subject to conditions tailored to these transactions. Under the final rule, a fund is permitted to engage in reverse repurchase agreements and similar financing transactions so long as they meet the asset coverage requirements under section 18. If the fund also borrows from a bank or issues bonds, for example, these senior securities as well as the reverse repurchase agreement would be required to comply with the asset coverage requirements under the Investment Company Act. This approach would provide the same asset coverage requirements under section 18 for reverse repurchase agreements and similar financing transactions, bank borrowings, and other borrowings permitted under the Investment Company Act. In a change from the proposal, a fund also will be permitted to enter into these transactions by electing to treat them as derivatives transactions under the final rule. This alternative approach will permit funds to apply a consistent set of requirements to its derivatives transactions and any reverse repurchase agreements or similar financing transactions.

A fund will be permitted to enter into unfunded commitment agreements under the final rule if the fund reasonably believes that its assets will allow the fund to meet its obligations under these agreements, as proposed. This approach recognizes that, while unfunded commitment agreements may raise the risk that a fund may be unable to meet its obligations under these transactions, such unfunded commitments do not generally involve the leverage and other risks associated with derivatives transactions.

In a change from the proposal, the final rule also includes a new provision that will permit funds, as well as money market funds, to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, subject to conditions. Money market funds, for example, will continue to be able to invest in when-issued U.S. Treasury securities under this provision notwithstanding that these investments trade on a forward basis involving a temporary delay between the transaction’s trade date and settlement date.

The amendments we are adopting to Forms N-PORT, N-LIQUID, and N-CEN will require each fund to provide information regarding its compliance with rule 18f-4. This information includes: (1) certain identifying information about the fund (*e.g.*, identifying the provisions of rule 18f-4 that the fund is relying on to engage in derivatives transactions and the other transactions that the rule addresses); (2) as applicable, information regarding a fund's VaR and designated reference portfolio, and VaR backtesting results; (3) VaR test breaches, to be reported to the Commission in a non-public current report; and (4) for a fund that is operating as a limited derivatives user, information about the fund's derivatives exposure and the number of business days that its derivatives exposure exceeded 10% of its net assets. We are adopting these amendments largely as proposed, with certain modifications, such as streamlining the VaR information and exposure information that certain funds would provide, and requiring additional information about funds operating as limited derivatives users that exceed the 10% threshold. We also are making certain of these data elements non-public in response to comments.

In connection with our adoption of rule 18f-4, we are also adopting amendments to rule 6c-11 under the Investment Company Act. Rule 6c-11 generally permits ETFs to operate without obtaining a Commission exemptive order, subject to certain conditions.⁷⁶ When the Commission adopted rule 6c-11, the rule prohibited leveraged/inverse ETFs from relying on the rule, to allow the Commission to consider the section 18 issues raised by these funds' investment strategies as part of a broader consideration of derivatives use by registered funds and BDCs.⁷⁷ As part of this further consideration, and in connection with the adoption of rule 18f-4, we are modifying this provision to permit leveraged/inverse ETFs to rely on rule 6c-11 if they comply with all applicable provisions of rule 18f-4. This will permit new leveraged/inverse funds that can satisfy the requirements of rule 18f-4 to come to market under rule 6c-11 without first being required to receive a separate ETF exemptive order. We also are rescinding exemptive orders the

⁷⁶ See generally Exchange-Traded Funds, Investment Company Act Release No. 33646 (Sept. 25, 2019) [84 FR 57162 (Oct. 24, 2019)] ("ETFs Adopting Release").

⁷⁷ See *id.* at nn.72-74 and accompanying text.

Commission previously issued to sponsors of leveraged/inverse funds permitting these funds to operate as ETFs, as these orders will be superseded. Amending rule 6c-11 and rescinding these exemptive orders will help promote a more level playing field by allowing any sponsor (in addition to the sponsors currently granted exemptive orders) to form and launch a leveraged/inverse ETF subject to the conditions in rule 6c-11 and rule 18f-4.

Finally, in view of the updated, comprehensive approach to the regulation of funds' derivative use that the final rules provide, we are rescinding Release 10666. In addition, staff in the Division of Investment Management has reviewed certain of its no-action letters and other guidance addressing derivatives transactions and other transactions covered by rule 18f-4 to determine which letters and staff guidance, or portions thereof, should be withdrawn in connection with our adoption of the final rules. As discussed in section II.L below, some of these letters and staff guidance, or portions thereof, are moot, superseded, or otherwise inconsistent with the final rule and, therefore, will be withdrawn. We are providing funds an eighteen-month transition period while they prepare to come into compliance with rule 18f-4 before Release 10666 is withdrawn.

II. DISCUSSION

A. Scope of Rule 18f-4

As proposed, the rule will apply to a “fund,” defined as a registered open-end or closed-end company or a BDC, including any separate series thereof.⁷⁸ The rule will therefore apply to mutual funds, ETFs, registered closed-end funds, and BDCs.⁷⁹ The rule’s definition of a “fund”

⁷⁸ See rule 18f-4(a); *see also* proposed rule 18f-4(a).

⁷⁹ Section 18 of the Investment Company Act applies only to open-end or closed-end companies (*i.e.*, management investment companies). Rule 18f-4 therefore will not apply to unit investment trusts (“UITs”) because they are not management investment companies. As the Commission has noted, derivatives transactions generally require a significant degree of management, and a UIT engaging in derivatives transactions therefore may not meet the Investment Company Act requirements applicable to UITs. *See* section 4(2) of the Investment Company Act; *see also* Custody Of Investment Company Assets with Futures Commission Merchants And Commodity Clearing Organizations, Investment Company Act Release No. 22389 (Dec. 11, 1996), at n.18 (explaining that UIT portfolios are generally unmanaged). *See also* ETFs Adopting Release, *supra* footnote 76, at n.42.

excludes money market funds regulated under rule 2a-7 under the Investment Company Act (“money market funds”), as proposed.⁸⁰

Commenters generally supported the scope of funds that are permitted to rely on the proposed rule.⁸¹ Some commenters also specifically expressed support for excluding money market funds from the full scope of rule 18f-4 because money market funds do not typically engage in derivatives transactions.⁸² Under rule 2a-7, money market funds seek to maintain a stable share price or limit principal volatility by limiting their investments to short-term, high-quality debt securities that fluctuate very little in value under normal market conditions. As a result of these and other requirements in rule 2a-7, money market funds do not enter into derivatives such as futures, swaps, and options. These instruments are not eligible securities in which money market funds are permitted to invest under rule 2a-7. We also believe that entering into these transactions would be inconsistent with a money market fund maintaining a stable share price or limiting principal volatility, especially if the money market fund were to use derivatives to leverage the fund’s portfolio.⁸³ We therefore continue to believe that generally excluding money market funds from the full scope of the rule is appropriate. As discussed in more detail below, we are, however, including a targeted provision in the final rule that permits funds (including money market funds) to continue to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle.

The final rule will permit funds to enter into derivatives transactions, subject to the rule’s conditions. The rule defines the term “derivatives transaction” to mean: (1) any swap, security-

⁸⁰ See rule 18f-4(a); *see also* proposed rule 18f-4(a).

⁸¹ See, e.g., Dechert Comment Letter I; Comment Letter of Fidelity Investments (Mar. 24, 2020) (“Fidelity Comment Letter”); Comment Letter of T. Rowe Price (Apr. 14, 2020) (“T. Rowe Price Comment Letter”).

⁸² See, e.g., Fidelity Comment Letter; J.P. Morgan Comment Letter; SIFMA AMG Comment Letter; Comment Letter of Stephen A. Keen (Aug. 11, 2020) (“Keen Comment Letter”).

⁸³ See Money Market Fund Reform; Amendments to Form PF, Investment Company Act Release No. 31166 (July 23, 2014) [79 FR 47735 (Aug. 14, 2014)] (discussing: (1) retail and government money market funds, which seek to maintain a stable net asset value per share; and (2) institutional non-government money market funds whose net asset value fluctuates, but nevertheless seek to minimize principal volatility given that, as “commenters pointed out[.], investors in floating NAV funds will continue to expect a relatively stable NAV”).

based swap, futures contract, forward contract, option, any combination of the foregoing, or any similar instrument (“derivatives instrument”), under which a fund is or may be required to make any payment or delivery of cash or other assets during the life of the instrument or at maturity or early termination, whether as margin or settlement payment or otherwise; (2) any short sale borrowing; and (3) reverse repurchase agreements and similar financing transactions, for those funds that choose to treat these transactions as derivatives transactions under the rule.⁸⁴

The first prong of this definition is designed to describe those derivatives transactions that involve the issuance of a senior security, because they involve a contractual future payment obligation.⁸⁵ This prong of the definition incorporates a list of derivatives instruments that, together with “any similar instrument,” covers the types of derivatives that funds currently use and that section 18 would restrict because they impose on the fund a contractual obligation (or potential obligation) to make payments or deliver assets to the fund’s counterparty. This list is designed to be sufficiently comprehensive to include derivatives that may be developed in the future.

This prong of the definition also provides that a derivatives instrument, for purposes of the rule, must involve a future payment obligation.⁸⁶ This aspect of the definition recognizes that not every derivatives instrument imposes such an obligation, and therefore not every derivatives instrument will involve the issuance of a senior security. A fund that purchases a standard option traded on an exchange, for example, generally will make a non-refundable premium payment to

⁸⁴ See rule 18f-4(a); see also *infra* section II.H (discussing the provision in the final rule that provides an option for funds to manage reverse repurchase agreements and similar financing transactions under the asset coverage provisions of section 18 applicable to bank borrowings. If a fund does not choose to use this option, then reverse repurchase agreements and similar financing transactions would instead be derivatives transactions under the final rule.).

⁸⁵ See *supra* footnotes 28, 36 and accompanying text (together, observing that “senior security” is defined in part as “any . . . similar obligation or instrument constituting a security and evidencing indebtedness,” and that the Commission has previously stated that, for purposes of section 18, “evidence of indebtedness” would include “all contractual obligations to pay in the future for consideration presently received”); see also *infra* footnotes 86-87 (recognizing that not every derivative instrument will involve the issuance of a senior security).

⁸⁶ Under the rule, a derivatives instrument is one where the fund “is or may be required to make any payment or delivery of cash or other assets during the life of the instrument or at maturity or early termination, whether as margin or settlement payment or otherwise.”

obtain the right to acquire (or sell) securities under the option but generally will not have any subsequent obligation to deliver cash or assets to the counterparty unless the fund chooses to exercise the option.⁸⁷ A derivative that does not impose any future payment obligation on a fund generally resembles a securities investment that is not a senior security, in that it may lose value but it will not require the fund to make any payments in the future.⁸⁸ Whether a transaction involves the issuance of a senior security will depend on the nature of the transaction. The label that a fund or its counterparty assigns to the transaction is not determinative.⁸⁹

A few commenters suggested that the Commission further revise the definition of a derivatives transaction to address situations where several derivatives instruments considered together, or a derivatives instrument and a securities position, in commenters' view did not involve the same risks as the derivatives transactions considered in isolation. For example, commenters urged that the definition exclude purchased option spread transactions because commenters asserted that the options together would not create a fund payment obligation that

⁸⁷ See 2015 Proposing Release, *supra* footnote 1, at paragraph accompanying nn.82-83. A few commenters suggested we address these purchased options specifically in rule 18f-4. See Comment Letter of Guggenheim Investments (Apr. 27, 2020) (“Guggenheim Comment Letter”); see also CBOE Comment Letter. We do not believe that further revisions to address these comments are necessary, however, because rule 18f-4’s definition of a derivatives transaction is limited to derivatives instruments that involve a future payment obligation.

⁸⁸ See 2015 Proposing Release, *supra* footnote 1, at paragraph accompanying n.82.

⁸⁹ For example, the Commission received a comment on the 2015 proposal addressing a type of total return swap, asserting that “[t]he Swap operates in a manner similar to a purchased option or structure, in that the fund’s losses under the Swap cannot exceed the amount posted to its tri-party custodian agreement for purposes of entering into the Swap,” and that, in the commenter’s view, the swap should be “afforded the same treatment as a purchased option or structured note” because “[a]lthough the Swap involves interim payments through the potential posting of margin from the custodial account, the payment obligations cannot exceed the [amount posted for purposes of entering into the Swap].” See Comment Letter of Dearborn Capital Management (Mar. 24, 2016). Unlike a fund’s payment of a one-time non-refundable premium in connection with a standard purchased option or a fund’s purchase of a structured note, this transaction appears to involve a fund obligation to make interim payments of fund assets posted as margin or collateral to the fund’s counterparty during the life of the transaction in response to market value changes of the underlying reference asset, as this commenter described. The fund also must deposit additional margin or collateral to maintain the position if the fund’s losses deplete the assets that the fund posted to initiate the transaction; if a fund effectively pursues its strategy through such a swap, or a small number of these swaps, the fund may as a practical matter be required to continue reestablishing the trade or refunding the collateral account in order to continue to offer the fund’s strategy. The transaction therefore appears to involve the issuance of a senior security as the fund may be required to make future payments.

See also *infra* section II.I (discussing the characterization of “unfunded commitment” agreements for purposes of the rule, and as senior securities).

will exceed the payment potential of a purchased option involved in the transaction.⁹⁰

Commenters also suggested that the scope of the rule should exclude written covered calls, which involves a fund selling a call option where the fund agrees to deliver an asset already held by the fund if the option is exercised.⁹¹ Because the fund holds the asset underlying the option, commenters asserted that the leverage risk of the option is eliminated.⁹²

Each of these examples, however, involves derivatives transactions that involve future payment obligations. We do not believe it would be appropriate or feasible to identify in rule 18f-4 combinations of derivatives instruments or other investments that, together, may involve less risk or different risks than the constituent transactions considered in isolation. We believe these kinds of relationships are appropriate to assess as part of a fund's derivatives risk management, but do not support excluding the kinds of transactions commenters identified from the rule's derivatives transaction definition.

Additionally, a commenter urged the Commission to exclude certain foreign exchange derivatives instruments from the scope of transactions covered by the rule because the commenter believes that these instruments have limited exposure to market fluctuations and do not introduce section 18 leverage concerns.⁹³ However, funds may use foreign currency derivatives to take speculative positions on the relationships between different currencies just as funds may use derivatives to obtain exposures to other rates or metrics or changes in asset prices.⁹⁴ Therefore, we do not believe that there is a principled basis to treat foreign currency

⁹⁰ See Comment Letter of CBOE Vest Financial LLC (Mar. 24, 2020) ("CBOE Vest Comment Letter") (stating that a "purchased-options-spread position is entered by buying and selling an equal number of options of the same class (*i.e.*, options on the same underlying security), same options style (*i.e.*, either only exercisable at expiration or exercisable at times prior to expiry), and same expiration date, but with different strike prices"); *see also* Guggenheim Comment Letter.

⁹¹ See Comment Letter of Refinitiv US SEF LLC (Mar. 24, 2020) ("Refinitiv Comment Letter"); *see also* CBOE Vest Comment Letter (stating that "[a]lthough sold call options in isolation do expose the fund to a potential future obligation, that obligation will be entirely offset by the position in the underlying security").

⁹² Refinitiv Comment Letter.

⁹³ *Id.* (requesting that FX forwards, FX swaps, non-deliverable forwards involving FX, and FX options be excluded from the scope of the rule).

⁹⁴ See 2015 Proposing Release, *supra* footnote 1, at paragraph accompanying n.239.

derivatives, such as foreign currency forwards and swaps, differently than other derivatives that involve a potential future payment obligation and are encompassed within the rule’s “derivatives transaction” definition.

Short sale borrowings are included in the second prong of the rule’s definition of “derivatives transaction.” We appreciate that short sales of securities do not involve derivatives instruments such as swaps, futures, and options. The value of a short position is, however, derived from the price of another asset, *i.e.*, the asset sold short. A short sale of a security provides the same economic exposure as a derivatives instrument, like a future or swap, that provides short exposure to the same security. The rule therefore treats short sale borrowings and derivatives instruments identically for purposes of funds’ reliance on the rule’s exemption.⁹⁵ Commenters did not address the treatment of short sale borrowings in the proposal’s definition of “derivatives transactions,” and we are adopting it as proposed.

The third prong of the definition reflects the final rule’s treatment of reverse repurchase agreements and similar financing transactions. In a change from the proposal and as discussed further in section II.H below, a fund may either elect to treat reverse repurchase agreements and similar financing transactions as derivatives transactions under the rule or elect to subject such transactions to the asset coverage requirements of section 18.⁹⁶ The final rule’s definition of “derivatives transaction” therefore includes a conforming change to reflect the final rule’s treatment of these transactions.

The final rule, like the proposed rule, does not specifically list firm or standby commitment agreements in the definition of “derivatives transaction.” However, as the Proposing Release discussed, we interpret the definitional phrase “or any similar instrument” to include these agreements. A firm commitment agreement has the same economic characteristics

⁹⁵ See rule 18f-4(b).

⁹⁶ See rule 18f-4(d); *see also infra* section II.H. Similarly, because rule 18f-4 addresses funds’ use of unfunded commitment agreements separately from funds’ use of derivatives, the definition of “derivatives transaction” does not include unfunded commitment agreements. *See infra* section II.J.

as a forward contract.⁹⁷ Similarly, the Commission has previously stated that a standby commitment agreement is economically equivalent to the issuance of a put option.⁹⁸ To the extent that a fund engages in transactions similar to firm or standby commitment agreements, they may fall within the “any similar instrument” definitional language, depending on the facts and circumstances.⁹⁹

Several commenters urged the Commission to exclude certain firm and standby commitment agreements from the scope of the rule or to subject them to different conditions.¹⁰⁰ Many commenters urged that money market funds, in particular, engage in these transactions and urged that the Commission clearly permit money market funds to continue to do so.¹⁰¹ In particular, these commenters identified transactions that trade on a when-issued basis, or that involve a settlement cycle that exceeds the “T+2” settlement cycle applicable to most securities transactions but that nonetheless settle within a short period of time. Commenters urged that these transactions limit the ability of funds to leverage their portfolios where the delay between trade date and settlement date is short, this delay is a result of the manner in which the securities are customarily issued or traded, and the fund intends to physically settle the transaction.¹⁰² Commenters explained that funds engage in these transactions to purchase the underlying securities rather than as a means of obtaining an unfunded investment exposure to the underlying security that may be effectively used by funds to leverage their portfolios.¹⁰³ Further,

⁹⁷ Indeed, the Commission stated in Release 10666 that a firm commitment is known by other names such as a “forward contract.” *See* Release 10666, *supra* footnote 14, at nn.10-12 and accompanying text.

⁹⁸ *See id.* at “Standby Commitment Agreements.”

⁹⁹ For example, a fund that enters into a binding commitment to make a loan or purchase a note upon demand by the borrower, with stated principal and term and a fixed interest rate, would appear to have entered into an agreement that is similar to a standby commitment agreement or a written put option. This transaction would expose the fund to investment risk during the life of the transaction because the value of the fund’s commitment agreement will change as interest rates change. Such an agreement thus would fall within the rule’s definition of “derivatives transaction.”

¹⁰⁰ *See, e.g.*, ICI Comment Letter; Invesco Comment Letter; SIFMA AMG Comment Letter.

¹⁰¹ *See, e.g.*, ICI Comment Letter; Fidelity Comment Letter; T. Rowe Price Comment Letter.

¹⁰² *See* SIFMA AMG Comment Letter; *see also* Keen Comment Letter.

¹⁰³ *See, e.g.*, ICI Comment Letter; Invesco Comment Letter; SIFMA AMG Comment Letter.

commenters stated that the use of when-issued U.S. Treasury securities transactions is an important tool to enhance transparency and pricing stability in the U.S. Treasury market, and subjecting the use of these transactions to the rule could diminish their use and negatively impact the short-term fixed income market.¹⁰⁴

We agree with commenters that the potential for leveraging is limited in these transactions, particularly because of the short period of time between trade date and settlement date and the fund's intention to physically settle the transaction rather than to engage in an offsetting transaction. Accordingly, we have included a provision in the final rule that allows funds to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, and the transaction will be deemed not to involve a senior security ("delayed-settlement securities provision").¹⁰⁵ While the final rule generally excludes money market funds from its scope, the scope of the rule's delayed-settlement securities provision includes money market funds, as well as the other funds to which the rule applies. This provision is subject to two conditions.

First, as some commenters suggested, the fund must intend to settle the transaction physically.¹⁰⁶ Physical settlement may occur electronically through the Depository Trust Company or other electronic platforms. This condition distinguishes these investments from bond forwards and other derivatives transactions where a fund commonly intends to execute an offsetting transaction rather than to actually purchase (or sell) the security. The provision is

¹⁰⁴ See SIFMA AMG Comment Letter. Investments in when-issued securities enable market participants to contract for the purchase and sale of a new security before the security has been issued. The most common type of when-issued trading involves U.S. Treasury securities. For example, on Monday, October 19th, the U.S. Treasury may announce that it will hold an auction of a specified quantity of new U.S. Treasury bills on Wednesday, October 21st with the securities being issued on Monday, October 25th. Following the announcement, market participants may begin to trade the new security on a when-issued basis. Settlement of the securities purchased on a when-issued basis as well as those purchased at auction will occur on the issue date.

¹⁰⁵ Rule 18f-4(f).

¹⁰⁶ SIFMA AMG Comment Letter; Fidelity Comment Letter. The discussion in this release regarding this condition and any future interpretation of this condition do not apply to the exclusion from the swap and security-based swap definitions for security forwards. See section 1a(47)(B)(ii) of the Commodity Exchange Act, 7 U.S.C. 1a(47)(B)(ii) (excluding from the swap and security-based swap definitions "any sale of a...security for deferred shipment or delivery, so long as the transaction is intended to be physically settled").

designed to permit funds to invest in the underlying security rather than to obtain unfunded investment exposure to the underlying security beyond the limited period of time between trade and settlement date.¹⁰⁷

Second, the transactions must settle within 35 days. Commenters addressing the short-term nature of these transactions offered differing suggestions for the permissible length of their settlement period.¹⁰⁸ Some commenters simply urged that we permit transactions with a “relatively short” delay between trade date and settlement date without specifying a particular number of days, while other commenters suggested a more precise 35-day period between trade date and settlement for a threshold.¹⁰⁹ The final rule’s 35-day settlement threshold reflects our view that securities that trade on a when-issued or forward-settling basis, or with a non-standard settlement cycle that have a settlement cycle of 35 days or less, more closely resemble regular-way securities transactions that are not covered by the rule rather than forwards and similar transactions that involve a greater potential for leveraging.¹¹⁰

We are not subjecting these transactions to an asset segregation requirement, as some commenters suggested, because we believe the conditions discussed above render that additional requirement unnecessary.¹¹¹ Because funds will be required to intend to settle these transactions

¹⁰⁷ Commenters suggested that the final rule also require that these transactions involve a defined delivery obligation, to distinguish these investments from the kinds of instruments included in the derivatives transaction definition. *See* Invesco Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter. Many derivatives transactions, however, such as forwards and futures contracts, involve a delivery obligation fixed at trade date. We therefore do not believe this condition is useful to distinguish when-issued and similar securities, and believe that the requirement that the fund intend to physically settle the transaction will serve to distinguish a fund’s intent to invest in the underlying securities from a fund engaging in derivatives transactions.

¹⁰⁸ *See, e.g.*, Invesco Comment Letter; ICI Comment Letter; Fidelity Comment Letter; SIFMA AMG Comment Letter.

¹⁰⁹ *See, e.g.*, Invesco Comment Letter; ICI Comment Letter; Fidelity Comment Letter; SIFMA AMG Comment Letter; Keen Comment Letter.

¹¹⁰ As one commenter observed, this 35-day period is consistent with the threshold under Regulation T, which provides that a transaction that settles in T+35 or sooner and has an extended settlement date due to the mechanics of the transaction, is not an extension of credit under the rule. *See* SIFMA AMG Comment Letter; *see also* Regulation T, Section 220.8(b)(2).

¹¹¹ *See, e.g.*, SIFMA AMG Comment Letter; Dechert Comment Letter I; Keen Comment Letter.

physically, funds must have sufficient assets to meet that obligation regardless of any separate asset segregation requirement in the final rule.

Commenters separately recommended that we provide an asset segregation approach for firm and standby commitment agreements generally.¹¹² For example, some commenters recommended a specific provision to address securities transactions that settle within a short period of time, similar to the delayed-settlement securities provision in the final rule.¹¹³ These commenters also urged that the Commission should permit funds the option of adopting an alternative asset segregation regime for when-issued securities, to-be-announced investments (“TBAs”), dollar rolls, and bond forwards, that have characteristics that would make them ineligible for such a provision, such as delays between trade date and settlement date that do not settle within a short period of time.¹¹⁴ Commenters asserted that any risks associated with these firm and standby commitment agreements can be appropriately managed by requiring funds to maintain assets sufficient to cover the obligations of the transactions, similar to the approach the Commission proposed for these transactions in 2015.¹¹⁵

Where these firm and standby commitment agreements and similar transactions do not satisfy the conditions in the delayed-settlement securities provision, we do not see a basis to differentiate the transactions from other instruments included in the derivatives transactions definition. For example, this suggested approach would treat a bond forward differently than an equity or currency forward. Moreover, we understand that funds typically settle forward contracts in cash, by an offsetting transaction, or by “rolling” the exposure via subsequent transactions. Therefore, bond forward contracts, and other transactions identified by commenters, could involve many of the same kinds of risks as other transactions that are considered

¹¹² See, e.g., Dechert Comment Letter I; ICI Comment Letter; Comment Letter of Calamos Investments LLC (May 1, 2020) (“Calamos Comment Letter”).

¹¹³ ICI Comment Letter; Calamos Comment Letter; Dechert Comment Letter I.

¹¹⁴ See ICI Comment Letter; Calamos Comment Letter; see also Dechert Comment Letter I (urging that, for purposes of the limited derivatives user exception, firm and standby commitment agreements should be excluded from a fund’s derivatives exposure threshold if a fund segregates liquid assets sufficient to cover such obligations).

¹¹⁵ See ICI Comment Letter; see also 2015 Proposing Release *supra* footnote 1, at section III.C.

derivatives transactions under the rule, such as futures contracts. We believe it is appropriate for the final rule to provide a consistent set of requirements for funds engaging in transactions that present the same kinds of risks rather than providing separate requirements for economically similar transactions.

The delayed-settlement securities provision also applies to money market funds. Commenters urged that the Commission permit money market funds to continue to invest in eligible securities under rule 2a-7, as they do today, even where those investments may involve when-issued securities or securities with a forward-settling convention or a non-standard settlement cycle.¹¹⁶ Money market funds today segregate assets in connection with these transactions under Release 10666, which we are rescinding. The delayed-settlement securities provision is designed to address commenters' concerns that the proposed rule would have resulted in uncertainty for money market funds that invest in certain when-issued securities or securities with a forward-settling convention or a non-standard settlement cycle. The final rule permits money market funds to continue to engage in these and the other types of transactions covered by the delayed-settlement securities provision.¹¹⁷ We have not, however, modified the rule to provide an exemption in rule 18f-4 for any eligible security as defined in rule 2a-7, as some commenters recommended.¹¹⁸ Rule 2a-7 imposes protective conditions on money market funds tailored to these funds' operations, including requirements for a money market fund to maintain a significant amount of liquid assets and invest in assets that meet the rule's credit quality, maturity, and diversification requirements. Rule 2a-7 is not, however, designed to

¹¹⁶ See, e.g., T. Rowe Price Comment Letter; Vanguard Comment Letter; ICI Comment Letter; Dechert Comment Letter I. Several commenters expressed particular concern that the proposed exclusion of money market funds from the scope of the rule would result in uncertainty with respect to the ability of money market funds to continue to invest in when-issued U.S. Treasury securities. See, e.g., ICI Comment Letter; Fidelity Comment Letter; T. Rowe Price Comment Letter.

¹¹⁷ The final rule provides that these transactions are not senior securities, but a money market fund must of course also comply with rule 2a-7 in connection with the investments.

¹¹⁸ See, e.g., BlackRock Comment Letter; Keen Comment Letter; T. Rowe Price Comment Letter; Vanguard Comment Letter.

address senior security concerns and its conditions alone do not provide a basis for an exemption from section 18.

In addition, although a fund or money market fund may invest in TBAs under the delayed-settlement securities provision, we are not excluding TBAs from the scope of the rule generally, as one commenter recommended.¹¹⁹ The TBA market facilitates the trading of forward-settling mortgage-backed securities by allowing participants to enter into a contract agreeing to purchase mortgage-backed securities issued by Fannie Mae, Freddie Mac and Ginnie Mae at a later date, typically, two or three months from the transaction date.¹²⁰ The commenter urged that the Commission reconsider the inclusion of TBAs within the rule’s derivatives transaction definition to avoid the possibility of a chilling effect on the market and because these transactions may be subject to margin requirements under FINRA rules.¹²¹ The other commenters who addressed TBAs, however, recommended that we clarify that TBAs are derivatives transactions under the rule.¹²²

TBAs and dollar rolls are included in the final rule’s derivatives transaction definition because we believe they are forward contracts or “similar instruments.”¹²³ We recognize the importance of TBAs to the market for forward-settling mortgage-backed securities and the importance of the FINRA margin requirements to the TBA market. However, TBAs, like other

¹¹⁹ See Fidelity Comment Letter.

¹²⁰ See Comment Letter of Putnam Investments (Apr. 1, 2020) (“Putnam Comment Letter”) (stating that “[i]n a TBA trade, the parties agree on six parameters of the securities to be delivered (issuer, maturity, coupon, price, par amount and settlement date), but the actual identity of the securities to be delivered at settlement is not specified [until 48 hours prior to the settlement]”).

¹²¹ See Fidelity Comment Letter. Under amended FINRA Rule 4210, effective March 25, 2021, brokers will be required to collect mark-to-market margin from counterparties engaging in TBA transactions.

¹²² See, e.g., Putnam Comment Letter; SIFMA AMG Comment Letter; ICI Comment Letter; cf. Invesco Comment Letter (recommending we permit certain short-term when-issued or forward-settling transactions and observing that the settlement periods for these transactions “are still relatively short compared to TBAs and other forward contracts captured by the Proposed Rule’s derivatives transaction definition”).

¹²³ See, e.g., SIFMA AMG Comment Letter. Some of the commenters who sought clarity that TBAs would be derivatives transactions under the final rule also argued that TBAs are not “similar financing transactions” that would be treated like reverse repurchase agreements under the final rule. We agree that TBAs are not reverse repurchase agreements or “similar financing transactions” under the rule.

forwards and similar instruments can be used to leverage a fund's portfolio by permitting funds to take unfunded positions in the underlying reference assets and involve a potential future payment obligation. The investor protection concerns the final rule is designed to address do not turn on the nature of a derivatives transaction's underlying reference assets. We do not see a basis to differentiate TBAs for purposes of the final rule from other types of transactions included in the derivatives transaction definition, where the fund's TBA investment does not satisfy the conditions of the delayed-settlement securities provision.

B. Derivatives Risk Management Program

A fund should manage its derivatives use to ensure alignment with the fund's investment objectives, policies, and restrictions, its risk profile, and relevant regulatory requirements. In addition, a fund's board of directors is responsible for overseeing the fund's activities and the adviser's management of risks, including any derivatives risks.¹²⁴ Given the dramatic growth in the volume and complexity of the derivatives markets over the past two decades, and the increased use of derivatives by certain funds and their related risks, we believe that requiring funds that are users of derivatives (other than limited derivatives users) to have a formalized risk management program with certain specified elements (a "program") supports exempting these transactions from section 18. A fund's program would be part of an adviser's overall management of portfolio risk and would complement—but would not replace—a fund's other risk management activities, such as a fund's liquidity risk management program adopted under rule 22e-4.

As proposed, under the program requirement we are adopting, a fund will have to adopt and implement a written derivatives risk management program that includes policies and procedures reasonably designed to manage the fund's derivatives risks. A derivatives risk

¹²⁴ See, e.g., Interpretive Matters Concerning Independent Directors of Investment Companies, Investment Company Act Release No. 24083 (Oct. 14, 1999) [64 FR 59877 (Nov. 3, 1999)]; Role of Independent Directors of Investment Companies, Investment Company Act Release No. 24816 (Jan. 2, 2001) [66 FR 3733 (Jan. 16, 2001)]; Independent Directors Council, *Fund Board Oversight of Risk Management* (Sept. 2011), available at http://www.ici.org/pdf/pub_11_oversight_risk.pdf ("2011 IDC Report").

manager whom the fund's board approves will be responsible for administering the program. A fund's derivatives risk management program should take into account the way the fund uses derivatives, whether to increase investment exposures in ways that increase portfolio risks or, conversely, to reduce portfolio risks or facilitate efficient portfolio management.

The program requirement is designed to result in a program with elements that are tailored to the particular types of derivatives that the fund uses and their related risks, as well as how those derivatives impact the fund's investment portfolio and strategy. A fund's program must include the following elements:

- *Program administration.* As proposed, the program will have to be administered by an officer or officers of the fund's investment adviser serving as the fund's derivatives risk manager.
- *Risk identification and assessment.* As proposed, the program will have to provide for the identification and assessment of a fund's derivatives risks, which must take into account the fund's derivatives transactions and other investments.
- *Risk guidelines.* As proposed, the program will have to provide for the establishment, maintenance, and enforcement of investment, risk management, or related guidelines that provide for quantitative or otherwise measurable criteria, metrics, or thresholds related to a fund's derivatives risks.
- *Stress testing.* As proposed, the program will have to provide for stress testing of derivatives risks to evaluate potential losses to a fund's portfolio under stressed conditions.
- *Backtesting.* The program will have to provide for backtesting of the VaR calculation model that the fund uses under the rule. We are adopting this requirement largely as proposed, but with a required weekly minimum frequency instead of the proposed daily frequency.
- *Internal reporting and escalation.* The program will have to provide for the reporting of certain matters relating to a fund's derivatives use to the fund's portfolio management

and board of directors. We are adopting this requirement largely as proposed, but with conforming amendments to reflect changes we are adopting to the relative VaR test.

- *Periodic review of the program.* A fund’s derivatives risk manager will be required to periodically review the program, at least annually, to evaluate the program’s effectiveness and to reflect changes in risk over time. We are adopting this requirement largely as proposed, but with conforming amendments to reflect changes we are adopting to the relative VaR test.

The program requirement is drawn from existing fund best practices. We believe it will enhance practices for funds that have not already implemented a derivatives risk management program, while building off practices of funds that already have one in place.

Many commenters expressed their broad support for the proposed derivatives risk management program.¹²⁵ In particular, commenters highlighted that the proposed rule would permit funds to tailor the derivatives risk management program to the particular unique needs of a fund.¹²⁶ One commenter acknowledged that the proposed derivatives risk management program would codify best practices many funds already have in place, including stress testing, backtesting, and other risk management tools.¹²⁷ As discussed below, commenters provided specific feedback regarding the individual elements of the program requirement.

1. Program Administration

The final rule will require an officer or officers of the fund’s investment adviser to serve as the fund’s derivatives risk manager.¹²⁸ The derivatives risk manager may not be a portfolio manager of the fund, and must have relevant experience regarding the management of

¹²⁵ See e.g. ICI Comment Letter; Comment Letter of the Investment Adviser Association (Apr. 30, 2020) (“IAA Comment Letter”); Blackrock Comment Letter; AQR Comment Letter I; Comment Letter of the Mutual Fund Directors Forum (Apr. 9, 2020) (“MFDF Comment Letter”); Dechert Comment Letter I.

¹²⁶ ICI Comment Letter; AQR Comment Letter I; MFDF Comment Letter; J.P. Morgan Comment Letter.

¹²⁷ Blackrock Comment Letter.

¹²⁸ Rule 18f-4(a).

derivatives risk.¹²⁹ We are adopting these requirements specifying what person(s) may be eligible to serve as the derivatives risk manager as proposed.

Persons Eligible to Serve as Derivatives Risk Manager

The proposed rule specified that the derivatives risk manager must be an officer or officers of the fund's investment adviser, and we are adopting this provision as proposed.¹³⁰ Many commenters supported allowing multiple officers to serve as the derivatives risk manager, and no commenters suggested that the rule should instead require that a single officer serve in this role.¹³¹ For example, one commenter believed allowing multiple officers would permit the derivatives risk manager to reflect a broader range of expertise.¹³² Commenters also noted that permitting multiple officers to serve as the derivatives risk manager would be consistent with the Investment Company Act rule governing the persons who may serve as administrators of funds' liquidity risk management programs.¹³³ Commenters urged, however, that the final rule also permit non-officer employees of the adviser to serve as the derivatives risk manager.¹³⁴ One commenter stated that allowing employees of the adviser to serve as the derivatives risk manager would provide needed flexibility for boards to approve the designation of the best individuals to

¹²⁹ See *infra* section II.C.1 (discussing the requirement that the board approve the designation of the derivatives risk manager, and stating that because the final definition of "derivatives risk manager" requires the person fulfilling the role to have "relevant experience regarding the management of derivatives risk," the board's consideration of the designation of the derivatives risk manager would necessarily take into account the candidate's experience, among all other relevant factors).

¹³⁰ Rule 18f-4(a); proposed rule 18f-4(a). Allowing multiple officers of the fund's adviser (including any sub-advisers) to serve as the fund's derivatives risk manager is designed to allow funds with differing sizes, organizational structures, or investment strategies to more effectively tailor the programs to their operations.

¹³¹ See J.P. Morgan Comment Letter; SIFMA AMG Comment Letter; Blackrock Comment Letter; Chamber Comment Letter; T. Rowe Price Comment Letter; ABA Comment Letter.

¹³² J.P. Morgan Comment Letter.

¹³³ See, e.g., J.P. Morgan Comment Letter.

¹³⁴ Dechert Comment Letter I; Fidelity Comment Letter; SIFMA AMG Comment Letter; Comment Letter of Angel Oak Capital (Apr. 30, 2020) ("Angel Oak Comment Letter"); Capital Group Comment Letter; Chamber Comment Letter.

serve in the role.¹³⁵ Some commenters supported allowing a third-party not affiliated with the adviser to serve as the derivatives risk manager.¹³⁶

After considering comments, we have determined to adopt the requirement that the derivatives risk manager must be an officer or officers of the fund's investment adviser as proposed. The person(s) serving in the role of the derivatives risk manager must be able to carry out their responsibilities under the rule, which requires that they administer the derivatives risk management program and policies and procedures in addition to the board reporting requirements.¹³⁷ The person(s) serving in this role must have sufficient authority within the investment adviser to carry out these responsibilities. We believe that an officer of the fund's investment adviser would be more likely to have the requisite level of seniority to be effective than a non-officer employee or third-party service provider. We recognize that investment advisers may have personnel who, although not designated as "officers" in accordance with the adviser's corporate bylaws, have a comparable degree of seniority and authority within the organization. Such a person therefore could have a comparable ability to carry out a derivatives risk manager's responsibilities under the final rule, if the person otherwise met the qualifications for being a derivatives risk manager. In these circumstances, we believe such a person(s) could be treated as an officer, for purposes of the final rule, and serve as a fund's derivatives risk manager if approved by the fund's board. This person, like any other person serving as a fund's derivatives risk manager, would have a direct reporting line to the board.

We recognize that employees of the adviser may have relevant derivatives risk management experience that would be helpful to the derivatives risk manager in administering the derivatives risk management program. While employees may not serve as the derivatives risk manager, they may provide support to the person(s) serving in the role. Advisory employees also may carry out derivatives risk management activities as discussed below.

¹³⁵ Fidelity Comment Letter; Angel Oak Capital Comment Letter.

¹³⁶ Comment Letter of Foreside Financial Group, LLC (Apr. 22, 2020) ("Foreside Comment Letter"); NYC Bar Comment Letter.

¹³⁷ See rule 18f-4(a); and rule 18f-4(c)(3).

Many commenters also urged the Commission to permit the fund’s adviser to serve as the derivatives risk manager.¹³⁸ Commenters maintained that, because the board has already considered the quality and expertise of the fund’s investment adviser, the adviser is well suited to serve as the derivatives risk manager.¹³⁹ Commenters also stated that requiring the board to consider and designate a separate individual(s) to serve as the derivatives risk manager is overly burdensome, compared to permitting the adviser to serve in this role.¹⁴⁰ Commenters stated that the adviser as an entity should serve as the derivatives risk manager, which could then designate its employees to staff the administration of the derivatives risk management program.¹⁴¹ Commenters also suggested that permitting a fund’s adviser to serve as the derivatives risk manager would be appropriate in light of the fact that the Commission’s liquidity risk management program rule permits a fund’s adviser to serve as the liquidity risk management program administrator.¹⁴² Conversely, some commenters expressly supported the Commission permitting a third party, separate from the adviser, to serve as the derivatives risk manager.¹⁴³

We are not allowing an adviser to serve as the derivatives risk manager under the final rule. We continue to believe that requiring the derivatives risk manager to be one or more natural persons, specifically approved by the board, will promote independence and objectivity in this role. We believe that requiring one or more officers of the adviser to serve in this role, rather than the adviser as an entity or a committee created by the adviser and composed of individuals

¹³⁸ See, e.g., Fidelity Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Comment Letter of Independent Directors Council (Apr. 20, 2020) (“IDC Comment Letter”); SIFMA AMG Comment Letter; BlackRock Comment Letter; Capital Group Comment Letter; Chamber Comment Letter; T. Rowe Price Comment Letter; ABA Comment Letter. One commenter supported the board approving a committee created by the adviser. J.P. Morgan Comment Letter.

¹³⁹ See Fidelity Comment Letter; Dechert Comment Letter I; ICI Comment Letter.

¹⁴⁰ See Fidelity Comment Letter; ICI Comment Letter; IDC Comment Letter. For example, one commenter stated that the proposed designation requirement could require extra board meetings, which is costly. Fidelity Comment Letter. Another commenter stated that having extra board meetings associated with designating the derivatives risk manager could delay the appointment of the derivatives risk manager. Fidelity Comment Letter.

¹⁴¹ See ICI Comment Letter; ABA Comment Letter.

¹⁴² Fidelity Comment Letter; Dechert Comment Letter I; ICI Comment Letter; IDC Comment Letter; SIFMA AMG Comment Letter; BlackRock Comment Letter.

¹⁴³ Foreside Comment Letter; NYC Bar Comment Letter; ABA Comment Letter.

selected by the adviser from time to time, would promote accountability to the board by creating a direct reporting line between the board and the individual(s) responsible for administering the program.¹⁴⁴ Unlike rule 22e-4, where the board is required to approve a fund's liquidity risk management program that contains certain specific program elements, the board is not required to approve the derivatives risk management program.¹⁴⁵ Instead, the board will engage with the derivatives risk management program through its appointment of the derivatives risk manager, who is responsible for administering the program and reporting to the board on the program's implementation and effectiveness.

Moreover, any person serving as a fund's derivatives risk manager is responsible for administering the fund's program under rule 18f-4. The rule does not require, however, that the person be responsible for carrying out all activities associated with the fund's derivatives risk management program, and we do not anticipate that the person necessarily would carry out all such activities. For example, the final rule provides that a fund's derivatives risk management program must provide for risk identification and assessment, the establishment of risk guidelines, and stress testing, but does not require that the individual(s) serving as the derivatives risk manager carry out these activities. The derivatives risk manager also could seek inputs that could help inform risk management from third parties that are separate from the adviser, such as third-party service providers, and may reasonably rely on such inputs. The derivatives risk manager therefore may benefit from the expertise and assistance of third-party service providers even though the service provider (or its employees) may not itself serve as the fund's derivatives risk manager.

Commenters expressed concern that, if an individual were to serve in the role, he or she could face personal liability for his or her administration of the program.¹⁴⁶ The final rule,

¹⁴⁴ See Proposing Release, *supra* footnote 1 (discussing the role of the derivatives risk manager).

¹⁴⁵ See *infra* section II.C. See also rules 22e-4 and 38a-1. Under rule 38a-1, boards will also be responsible for overseeing compliance with rule 18f-4. See *infra* paragraph accompanying footnote 247.

¹⁴⁶ See, e.g., ICI Comment Letter; SIFMA AMG Comment Letter; NYC Bar Comment Letter; Chamber Comment Letter.

however, does not change the standards that apply in determining whether a person is liable for aiding or abetting or causing a violation of the federal securities laws. We recognize that risk management necessarily involves judgment. That a fund suffers losses does not, itself, mean that a fund's derivatives risk manager acted inappropriately.

Segregation of Derivatives Risk Management Function from Fund's Portfolio Management

The rule will prohibit the derivatives risk manager position from being filled by the fund's portfolio manager, if a single person serves in this position.¹⁴⁷ Similarly, if multiple officers serve as a derivatives risk manager, a majority of these persons may not be composed of portfolio managers. The rule will require a fund to reasonably segregate the functions of the program from its portfolio management.¹⁴⁸ We are adopting each of these requirements as proposed.

Several commenters supported the proposed requirement that the derivatives risk manager not be the fund's portfolio manager.¹⁴⁹ While one commenter agreed that portfolio managers should not serve as the derivatives risk manager, the commenter stated that portfolio managers do have expertise the derivatives risk management program may need in order to react to market events.¹⁵⁰ Commenters stated that smaller firms may have more difficulty segregating portfolio management from derivatives risk management due to limited personnel qualified to serve in these roles.¹⁵¹ In order to provide flexibility, one commenter suggested that we should permit a fund's derivatives risk manager to be the portfolio manager of a separate fund.¹⁵²

We continue to believe that it is important to segregate the portfolio management function from the risk management function. Segregating derivatives risk management from portfolio management is designed to promote objective and independent identification,

¹⁴⁷ Rule 18f-4(c)(1).

¹⁴⁸ *Id.*

¹⁴⁹ See SIFMA AMG Comment Letter; ABA Comment Letter.

¹⁵⁰ ABA Comment Letter.

¹⁵¹ ABA Comment Letter; SIFMA AMG Comment Letter.

¹⁵² ABA Comment Letter.

assessment, and management of the risks associated with derivatives use. Accordingly, this element of the derivatives risk manager requirement is designed to enhance the independence of the derivatives risk manager and other risk management personnel and, therefore, to enhance the program's effectiveness.¹⁵³ Because a fund may compensate its portfolio management personnel in part based on the returns of the fund, the incentives of portfolio managers may not always be consistent with the restrictions that a derivatives risk management program would impose. Keeping these functions separate in the context of derivatives risk management should help mitigate the possibility that these competing incentives diminish the program's effectiveness.

Separation of the derivatives risk management function and the portfolio management function creates important checks and balances. Separation of functions may be established through a variety of methods, such as independent reporting chains, oversight arrangements, or separate monitoring systems and personnel. While we understand that smaller funds may have more limited employee resources, making it more difficult to segregate the portfolio management and derivatives risk management functions, we continue to believe that segregation of these functions is important and funds may need to hire additional personnel.¹⁵⁴ The reasonable segregation requirement is not meant to indicate that the derivatives risk manager and portfolio management must be subject to a communications "firewall." For example, the internal reporting and escalation requirements we are adopting will require communication between a fund's risk management and portfolio management regarding the operation of the program.¹⁵⁵ We recognize the important perspective and insight regarding the fund's use of derivatives that the portfolio manager can provide and generally understand that the fund's derivatives risk

¹⁵³ See, e.g., Comptroller of the Currency Administrator of National Banks, *Risk Management of Financial Derivatives: Comptroller's Handbook* (Jan. 1997), at 9 (discussing the importance of independent risk management functions in the banking context).

¹⁵⁴ See *infra* III.C.1. In addition, and as proposed, the final rule prohibits a portfolio manager from serving as the derivatives risk manager for funds for which he or she is a portfolio manager, but does not prohibit that person from serving as the derivatives risk manager for other funds. See *supra* footnote 152 and accompanying text.

¹⁵⁵ See *infra* section II.B.2.e.

manager would work with the fund’s portfolio management in implementing the program requirement.

Relevant Experience Regarding the Management of Derivatives Risk

The final rule, as proposed, requires a fund’s derivatives risk manager to have relevant experience regarding the management of derivatives risk.¹⁵⁶ This requirement is designed to reflect the potential complex and unique risks that derivatives can pose to funds and promote the selection of a derivatives risk manager who is well-positioned to manage these risks.

Some commenters requested clarification regarding this requirement. In particular, commenters requested clarification of what “relevant experience” means in the context of selecting a derivatives risk manager.¹⁵⁷ One commenter suggested that “relevant experience” should not require expertise in all types of derivatives risk.¹⁵⁸ The requirement that the derivatives risk manager must have “relevant experience” is designed to provide flexibility such that the person(s) serving in this role may have experience that is relevant in light of the derivatives risks unique to the fund, rather than the rule taking a more prescriptive approach in identifying a specific amount or type of experience that the derivatives risk manager must have. We do not believe it would be practical to detail in our rules the specific experience a derivatives risk manager should hold. We recognize that different funds may appropriately seek out different types of derivatives risk experience from their respective derivatives risk managers, depending on the funds’ particular circumstances.

Program Administration in the Context of Sub-Advised Funds

A number of commenters sought clarification about the administration of a fund’s derivatives risk management program for sub-advised funds. Commenters supported permitting the derivatives risk manager to delegate certain aspects of the day-to-day management of the

¹⁵⁶ Rule 18f-4(a).

¹⁵⁷ Dechert Comment Letter I; ICI Comment Letter; IDC Comment Letter.

¹⁵⁸ ABA Comment Letter.

derivatives risk management program to the fund's sub-adviser(s).¹⁵⁹ Further, commenters suggested that the derivatives risk manager should develop a program specifying the responsibilities and role of the sub-adviser.¹⁶⁰ One commenter, for example, stated that sub-advisers would provide important support to the derivatives risk manager by identifying and assessing the fund's derivatives risks, to establish, maintain, and enforce certain risk guidelines, and to implement the measures needed if those guidelines are exceeded.¹⁶¹ Several commenters stated that while the derivatives risk manager should be able to create a role for sub-advisers in the derivatives risk management program, the derivatives risk manager should retain the board reporting responsibilities.¹⁶²

The final rule provides flexibility for funds to involve sub-advisers in derivatives risk management. For example, the rule permits a group of individuals to serve as a fund's derivatives risk manager, which could include officers of both the fund's primary adviser and sub-adviser(s).¹⁶³ For a fund in which a sub-adviser manages the entirety of the fund's portfolio (as opposed to a portion, or "sleeve" of the fund's assets), the officer(s) of a sub-adviser alone also could serve as a fund's derivatives risk manager, if approved by the fund's board.¹⁶⁴

In addition, the final rule does not preclude a derivatives risk manager from delegating to a sub-adviser specific derivatives risk management activities that are not specifically assigned to the derivatives risk manager in the final rule, subject to appropriate oversight. The derivatives risk manager also may reasonably rely on information provided by sub-advisers in fulfilling his

¹⁵⁹ See, e.g., ICI Comment Letter; SIFMA AMG Comment Letter; Capital Group Comment Letter; T. Rowe Price Comment Letter. A number of these commenters noted that the staff of the Commission had provided guidance regarding sub-advisers in the context of rule 22e-4.

¹⁶⁰ T. Rowe Price Comment Letter; ICI Comment Letter.

¹⁶¹ ICI Comment Letter.

¹⁶² T. Rowe Price Comment Letter; ICI Comment Letter.

¹⁶³ See *supra* footnote 129 (explaining that the term "adviser" as used in this release and rule 18f-4 generally refers to any person, including a sub-adviser, that is an "investment adviser" of an investment company as that term is defined in section 2(a)(20) of the Investment Company Act); see also Proposing Release, *supra* footnote 1, at n. 107.

¹⁶⁴ See *infra* paragraph accompanying footnote 166 (discussing delegation of risk management activities).

or her responsibilities under the rule. The fund, of course, retains ultimate responsibility for compliance with rule 18f-4, and the derivatives risk manager remains responsible under the rule for the reporting obligations to the board and the administration of the derivatives risk management program.¹⁶⁵ Accordingly, where a fund delegates risk management activities to a sub-adviser, in order to be reasonably designed to manage the fund's derivatives risks and achieve compliance with the rule, the fund's policies and procedures generally should address the oversight of any delegated activities, including the scope of and conditions on activities delegated to a sub-adviser(s), as well as oversight of the sub-adviser(s). The same considerations would apply with respect to any sub-delegates.

For certain elements of the derivatives risk management program, delegation to a sub-adviser that manages a sleeve of a fund's assets generally would not be consistent with the fund's obligations to implement a derivatives risk management program under rule 18f-4. For example, certain elements of the derivatives risk management program (*e.g.*, stress testing) must be evaluated at the portfolio level. We therefore believe that the fund's derivatives risk manager and not the sub-adviser may be better suited in this case—in having a portfolio-level view—to administer these program elements.¹⁶⁶ Sub-advisers managing a portion of the fund's assets, however, may be appropriately positioned to assist the derivatives risk manager by providing information relevant to the derivatives risk management program at a more-granular level. Examples of these areas include risk identification, risk assessment, and monitoring the program's risk guidelines.

¹⁶⁵ See rule 18f-4(a); rule 18f-4(c)(3)(ii) and (iii); *see also infra* section II.C.

¹⁶⁶ *See infra* section II.B.2.c.

2. Required Elements of the Program

a. Risk Identification and Assessment

We are adopting, as proposed, the requirement that a fund must identify and assess its derivatives risks as part of the derivatives risk management program.¹⁶⁷ This assessment must take into account the fund's derivatives transactions and other investments.

Commenters supported the proposed risk identification and assessment requirement. One commenter expressed support for the flexible, principles-based nature of this program element.¹⁶⁸ Several commenters agreed that the derivatives risk management program should begin with risk identification and assessment.¹⁶⁹ No commenter opposed this requirement.

We continue to believe that an appropriate assessment of derivatives risks generally involves assessing how a fund's derivatives may interact with the fund's other investments or whether the fund's derivatives have the effect of helping the fund manage risks.¹⁷⁰ As proposed, the rule defines the derivatives risks that must be identified and managed to include leverage, market, counterparty, liquidity, operational, and legal risks, as well as any other risks the derivatives risk manager deems material.¹⁷¹ In the context of a fund's derivatives transactions:

¹⁶⁷ See rule 18f-4(c)(1)(i); *compare with* proposed rule 18f-4(c)(1)(i).

¹⁶⁸ J.P. Morgan Comment Letter.

¹⁶⁹ J.P. Morgan Comment Letter; Comment Letter of Morningstar, Inc. (Mar. 24 2020) ("Morningstar Comment Letter").

¹⁷⁰ For example, the risks associated with a currency forward would differ if a fund is using the forward to hedge the fund's exposure to currency risk associated with a fund investment denominated in a foreign currency or, conversely, to take a speculative position on the relative price movements of two currencies. We believe that by assessing its derivatives use holistically, a fund will be better positioned to implement a derivatives risk management program that does not over- or understate the risks its derivatives use may pose. Accordingly, we believe that this approach will result in a more-tailored derivatives risk management program. *See, e.g.*, Proposing Release, *supra* footnote 1, at section II.B.3 (discussing the goal of promoting tailored derivatives risk management programs).

¹⁷¹ Rule 18f-4(a); *see also* proposed rule 18f-4(a). In the case of funds that are limited derivatives users under the rule, the definition will include any other risks that the fund's investment adviser (as opposed to the fund's derivatives risk manager) deems material, because a fund that is a limited derivatives user would be exempt from the requirement to adopt a derivatives risk management program (and therefore also exempt from the requirement to have a derivatives risk manager). *See infra* section II.E.

- Leverage risk generally refers to the risk that derivatives transactions can magnify the fund's gains and losses;¹⁷²
- Market risk generally refers to risk from potential adverse market movements in relation to the fund's derivatives positions, or the risk that markets could experience a change in volatility that adversely impacts fund returns and the fund's obligations and exposures;¹⁷³
- Counterparty risk generally refers to the risk that a counterparty on a derivatives transaction may not be willing or able to perform its obligations under the derivatives contract, and the related risks of having concentrated exposure to such a counterparty;¹⁷⁴
- Liquidity risk generally refers to risk involving the liquidity demands that derivatives can create to make payments of margin, collateral, or settlement payments to counterparties;
- Operational risk generally refers to risk related to potential operational issues, including documentation issues, settlement issues, systems failures, inadequate controls, and human error;¹⁷⁵ and
- Legal risk generally refers to insufficient documentation, insufficient capacity or authority of counterparty, or legality or enforceability of a contract.¹⁷⁶

¹⁷² See, e.g., Independent Directors Council, *Board Oversight of Derivatives Task Force Report* (July 2008), at 12 ("2008 IDC Report").

¹⁷³ Funds should consider market risk together with leverage risk because leveraged exposures can magnify such impacts. See, e.g., NAPF, *Derivatives and Risk Management Made Simple* (Dec. 2013), available at https://www.jpmorgan.com/cm/BlobServer/is_napfms2013.pdf?blobkey=id&blobwhere=1320663533358&blobheader=application/pdf&blobheadername1=Cache-Control&blobheadervalue1=private&blobcol=urldata&blobtable=MungoBlobs.

¹⁷⁴ See, e.g., Nils Beier, *et al.*, *Getting to Grips with Counterparty Risk*, McKinsey Working Papers on Risk, Number 20 (June 2010).

¹⁷⁵ See, e.g., 2008 IDC Report, *supra* footnote 172; RMA, *Statement on best practices for managing risk in derivatives transactions* (2004) ("Statement on best practices for managing risk in derivatives transactions"), available at <http://www.rmahq.org/securities-lending/best-practices>.

¹⁷⁶ See Proposing Release, *supra* footnote 1, at n.123 (providing additional details and examples regarding each of these elements of legal risk, and describing how, because derivatives contracts that are traded over the counter are not standardized, they bear a certain amount of legal risk in that poor draftsmanship, changes in laws, or other reasons may cause the contract to not be legally enforceable against the counterparty).

We believe these risks are common to most derivatives transactions.¹⁷⁷ We did not receive any comments regarding the risks that are included in the definition of “derivatives risks” under the rule.

The rule does not limit a fund’s identification and assessment of derivatives risks to only those specified in the rule. As proposed, the definition of the term “derivatives risks” that we are adopting includes any other risks a fund’s derivatives risk manager deems material. Some derivatives transactions could pose certain idiosyncratic risks. For example, some derivatives transactions could pose a risk that a complex OTC derivative could fail to produce the expected result (*e.g.*, because historical correlations change or unexpected merger events occur) or pose a political risk (*e.g.*, events that affect currencies). To the extent the derivatives risk manager considers any such idiosyncratic risk to be material, that risk would be a “derivatives risk” for purposes of the rule.

b. Risk Guidelines

We are adopting, as proposed, the requirement that a fund’s program provide for the establishment, maintenance, and enforcement of investment, risk management, or related guidelines that provide for quantitative or otherwise measurable criteria, metrics, or thresholds of the fund’s derivatives risks (the “guidelines”).¹⁷⁸ The guidelines must specify levels of the given criterion, metric, or threshold that a fund does not normally expect to exceed and the measures to be taken if they are exceeded.¹⁷⁹ The guidelines requirement is designed to address the derivatives risks that a fund would be required to monitor routinely as part of its program, and to help the fund identify when it should respond to changes in those risks.

Many commenters supported the proposed risk guidelines requirement, specifically expressing their support for a requirement that does not impose specific limits or guidance for how the risk thresholds should be calculated.¹⁸⁰ One commenter, however, stated that the

¹⁷⁷ See *id.* at n.124.

¹⁷⁸ Rule 18f-4(c)(1)(ii); see also proposed rule 18f-4(c)(1)(ii).

¹⁷⁹ Rule 18f-4(c)(1)(ii).

¹⁸⁰ See, *e.g.*, J.P. Morgan Comment Letter; Morningstar Comment Letter.

proposed guidelines should be removed because many risks are not susceptible to quantification.¹⁸¹ The commenter also stated that, for aspects of the required derivatives risk management program where quantitative measures are likely to be used, such as stress testing and backtesting results, the proposed quantitative guidelines requirement would be duplicative.¹⁸² Several other commenters requested clarification. Specifically, one asked for clarification that non-quantifiable risks may be managed through other practices.¹⁸³ Other commenters asked for more detailed criteria for how a fund should define its program's risk guidelines.¹⁸⁴

We continue to believe that risk guidelines are a key component of a fund's derivatives risk management. To manage risks, a fund must identify relevant risks and put in place means to measure them. A fund's risk guidelines are designed to complement, and not duplicate, the stress testing and other aspects of the fund's derivatives risk management program. For example, a fund's risk guidelines would provide information about the fund's portfolio risks in current market conditions, as opposed to the fund's stress testing, which would evaluate the effects of stressed conditions. We recognize, however, that some risks may not be readily quantifiable or measurable and reflected in a risk guideline. For example, certain legal risks may not fit within a quantifiable risk guideline.¹⁸⁵ We agree that one appropriate way to manage these risks is through other practices, such as review and approval procedures for derivatives contracts as suggested by one commenter, consistent with the overall requirement in the final rule that the fund's policies and procedures be reasonably designed to manage the fund's derivatives risks.¹⁸⁶

The final rule, as proposed, does not impose specific risk limits for these guidelines, but instead requires a fund to adopt guidelines that provide for quantitative thresholds tailored to the

¹⁸¹ ABA Comment Letter.

¹⁸² *See id.*

¹⁸³ J.P. Morgan Comment Letter.

¹⁸⁴ *See* Dechert Comment Letter I; ABA Comment Letter.

¹⁸⁵ J.P. Morgan Comment Letter.

¹⁸⁶ Rule 18f-4(c)(1).

fund. We believe that the quantitative thresholds should be those the fund determines to be appropriate and that are most pertinent to its investment portfolio, and that the fund reasonably determines are consistent with its risk disclosure.¹⁸⁷ A fund must establish discrete metrics to monitor its derivatives risks, which will require the fund and its derivatives risk manager to measure changes in the fund's risks regularly, and this in turn is designed to lead to timelier steps to manage these risks. Moreover, a fund must identify its response when these metrics have been exceeded, which should provide the fund's derivatives risk manager with a clear basis from which to determine whether to involve other persons, such as the fund's portfolio management or board of directors, in addressing derivatives risks appropriately.¹⁸⁸

Funds may use a variety of approaches in developing guidelines that comply with the rule.¹⁸⁹ This draws on the risk identification element of the program and the scope and objectives of the fund's use of derivatives. The rule will allow a fund to use quantitative metrics that it determines would allow it to monitor and manage its particular derivatives risks most appropriately. In developing the guidelines (and determining whether to change the guidelines), a fund generally should consider how to implement them in view of its investment portfolio and the fund's disclosure to investors. For example, a fund could consider establishing corresponding investment size controls or lists of approved transactions across the fund.¹⁹⁰ A fund generally should consider whether to implement appropriate monitoring mechanisms designed to allow the fund to abide by the guidelines, including the guidelines' quantitative metrics.

¹⁸⁷ See, e.g., Mutual Fund Directors Forum, *Risk Principles for Fund Directors: Practical Guidance for Fund Directors on Effective Risk Management Oversight* (Apr. 2010), available at http://www.mfdf.org/images/Newsroom/Risk_Principles_6.pdf.

¹⁸⁸ See rule 18f-4(c)(1)(v).

¹⁸⁹ See, e.g., Comprehensive Risk Management of OTC Derivatives, *supra* footnote 177; Statement on best practices for managing risk in derivatives transactions, *supra* footnote 175; 2008 IDC Report, *supra* footnote 172.

¹⁹⁰ A fund could also consider establishing an approved list of specific derivatives instruments or strategies that may be used, as well as a list of persons authorized to engage in the transactions on behalf of the fund. A fund could consider providing new instruments (or instruments newly used by the fund) additional scrutiny. See, e.g., MFDF Guidance, *supra* footnote 187, at 8.

c. Stress Testing

A fund's program must provide for stress testing to evaluate potential losses to the fund's portfolio.¹⁹¹ We are adopting this requirement as proposed.¹⁹² Specifically, the fund's stress tests must evaluate potential losses in response to extreme but plausible market changes or changes in market risk factors that would have a significant adverse effect on the fund's portfolio.¹⁹³ The stress tests must take into account correlations of market risk factors and resulting payments to derivatives counterparties. Finally, the frequency with which stress testing is conducted must take into account the fund's strategy and investments and current market conditions, provided that stress tests must be conducted no less frequently than weekly.

Many commenters expressed general support for the proposed stress testing requirement.¹⁹⁴ They stated, for example, that stress testing provides funds with valuable information regarding potentially extreme market conditions that the rule's VaR test may not capture.¹⁹⁵ We agree, and we continue to believe that stress testing is an important component to a fund's derivatives risk management program.¹⁹⁶ We believe stress testing is an important tool to evaluate different drivers of derivatives risks, including non-linear derivatives risks that may be understated by metrics or analyses that do not focus on periods of stress. We also continue to believe that stress testing will serve as an important complement to the VaR-based limit on fund leverage risk, as well as any VaR testing under the fund's risk guidelines.

¹⁹¹ Rule 18f-4(c)(1)(iii).

¹⁹² *See* proposed rule 18f-4(c)(1)(iii).

¹⁹³ The rule requires a fund that is required to establish a derivatives risk management program to stress test its portfolio, that is, all of the fund's investments, and not just the fund's derivatives transactions. Rule 18f-4(c)(1)(iii).

¹⁹⁴ *See, e.g.*, Dechert Comment Letter I; Fidelity Comment Letter; J.P. Morgan Comment Letter; Better Markets Comment Letter; Invesco Comment Letter; Morningstar Comment Letter; AQR Comment Letter I; SIFMA AMG Comment Letter.

¹⁹⁵ *See, e.g.*, Dechert Comment Letter I; J.P. Morgan Comment Letter.

¹⁹⁶ The Commission also has required certain types of funds to conduct stress tests or otherwise consider the effect of stressed market conditions on their portfolios. *See* rule 2a-7 under the Investment Company Act; *see also* rule 22e-4 under the Investment Company Act (requiring a fund subject to the rule to assess its liquidity risk by considering, for example, its investment strategy and portfolio investment liquidity under reasonably foreseeable stressed conditions).

Commenters generally agreed with the proposed approach not to require stress tests to include certain identified market risk factors. One commenter stated that the stress testing requirement took the “right approach by not prescribing specific stress testing scenarios, magnitudes, or types of simulations.”¹⁹⁷ We continue to believe that a principles-based approach to stress testing allows funds to tailor their simulations to a fund’s particular relevant risk factors.¹⁹⁸

As proposed, the rule requires that stress tests take into account correlations of market risk factors and resulting payments to derivatives counterparties.¹⁹⁹ One commenter requested clarification regarding the scope of “correlations of market risk factors.”²⁰⁰ The commenter stated that there were many factors beyond the six factors that the Proposing Release identified—liquidity, volatility, yield curve shifts, sector movements, or changes in the price of the underlying reference security or asset—that could be considered for stress testing. As discussed in the proposal, these requirements are designed to promote stress tests that produce results that are valuable in appropriately managing derivatives risks by focusing the testing on extreme events that may provide actionable information to inform a fund’s derivatives risk management. We agree with the commenter that there are factors other than the six specific factors provided as an example in the Proposing Release that could be considered for stress testing. For example, stress testing could also take into account interest rates, credit spreads, volatility, and foreign exchange rates.²⁰¹ The specific factors to consider in a particular stress test may vary from fund to fund and will require judgment by fund risk professionals in designing stress tests. The rule’s principles-based approach to stress testing will provide flexibility to enable those professionals to exercise their judgment in designing and implementing the stress tests required by the rule.

In terms of the frequency of stress testing, comments were mixed. Some commenters specifically stated their support for the proposed weekly stress testing requirement. For example,

¹⁹⁷ J.P. Morgan Comment Letter.

¹⁹⁸ See Proposing Release, *supra* footnote 1, at paragraphs accompanying nn.138-144.

¹⁹⁹ See rule 18f-4(c)(1)(iii).

²⁰⁰ ICI Comment Letter.

²⁰¹ See Refinitiv Comment Letter.

some acknowledged that the proposed timing requirement is consistent with many funds' current practice.²⁰² Several commenters, however, supported decreasing the frequency of the stress testing requirement.²⁰³ Some specifically suggested a monthly stress testing requirement.²⁰⁴ Alternatively, rather than specifying the frequency of stress tests in the rule, some commenters preferred that the derivatives risk manager be given the discretion to determine the appropriate frequency.²⁰⁵ Commenters urging less frequent stress testing stated that weekly stress tests are too burdensome, particularly during times of low market stress.²⁰⁶ One commenter contended that weekly stress testing would not be necessary given the overlay of the rule's VaR-based limit on fund leverage risk.²⁰⁷

We continue to believe that weekly stress testing is an important risk management tool. During periods of stress, returns, correlations, and volatilities tend to change dramatically over a very short period of time.²⁰⁸ These and other variables also can change quickly outside of periods of overall market stress or as stressed conditions begin to materialize. Monthly stress testing may not be frequent enough to observe these trends or to identify risks that may arise or become more acute if market conditions were to change quickly. Weekly or more frequent stress testing may be particularly useful during times of unexpected or unprecedented market stress. Monthly stress

²⁰² J.P. Morgan Comment Letter; Better Markets Comment Letter.

²⁰³ Dechert Comment Letter I; Fidelity Comment Letter, at 13; T. Rowe Price Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter; Comment Letter of PIMCO (Apr. 30, 2020) ("PIMCO Comment Letter"); ABA Comment Letter (advocating that the stress testing requirement for UCITs should be used).

²⁰⁴ Dechert Comment Letter I; Fidelity Comment Letter; T. Rowe Price Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter; PIMCO Comment Letter.

²⁰⁵ Dechert I Comment Letter; Fidelity Comment Letter; T. Rowe Price Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter; PIMCO Comment Letter; ISDA Comment Letter.

²⁰⁶ *See* Dechert Comment Letter I; ICI Comment Letter (stating that, particularly in periods of low market stress, weekly stress testing is not generally necessary and that monthly stress testing would allow a fund to observe trends and changes over time without sacrificing its ability to assess in a timely manner its risk of potential loss).

²⁰⁷ ICI Comment Letter.

²⁰⁸ *See supra* footnote 23 and accompanying text.

testing may not provide a fund’s derivatives risk manager adequate and timely insight into the fund’s derivatives risk, particularly where the fund has a high portfolio turnover.

We believe that the minimum weekly stress testing frequency balances the attendant costs of establishing a stress testing program with the benefits of frequent testing.²⁰⁹ While a fund must run stress tests on a weekly basis, the scope of stress testing may vary. Funds may, for example, conduct more-detailed scenario analyses on a less-frequent basis—such as the monthly frequency suggested by some commenters—while conducting more-focused weekly stress tests under rule 18f-4.

In response to commenters that stated that weekly stress testing would not be necessary when complemented by VaR limits, losses under stressed conditions—or “tail risks”—would not be reflected in VaR analyses that are not calibrated to a period of market stress and that do not estimate losses that occur on the trading days with the highest losses.²¹⁰ Requiring funds to stress test their portfolios would provide information regarding these “tail risks” that VaR and other analyses may miss. Stress testing allows funds to tailor the hypothetical scenario to the needs of a particular fund. VaR, in contrast, is based on historical data. The rule’s VaR test is intended as an outer limit on fund leverage risk. Stress testing may identify risks that may not result in a VaR breach, yet may not be appropriate in light of the fund’s investment strategy. We continue to believe that stress testing and VaR limits are complementary and important tools to help funds manage their derivatives risk.

²⁰⁹ See *infra* section III.C.1. We recognize that the costs associated with stress testing may increase with the frequency of conducting such tests. We understand, however, that once a fund initially implements a stress testing framework, subsequent stress tests could be automated and, as a result, be less costly.

In establishing the frequency of stress testing, a fund must take into account the fund’s strategy and market conditions. See rule 18f-4(c)(2). For example, a fund whose strategy involves a high portfolio turnover might determine to conduct stress testing more frequently than a fund with a more static portfolio. A fund similarly might conduct more-frequent stress tests in response to increases in market stress. In determining this minimum frequency, we also took into account that this requirement would only apply to funds that do not qualify for the limited derivatives user exception because they use derivatives in a more limited way.

²¹⁰ The rule does not require a fund to implement a stressed VaR test. See *infra* section II.D.1.

d. Backtesting

The rule will require a fund to backtest the results of the VaR calculation model used by the fund in connection with the relative VaR or absolute VaR test, as applicable, as part of the program.²¹¹ As proposed, the backtesting requirement will require that the fund compare its actual gain or loss for each business day with the VaR the fund had calculated for that day, and identify as an exception any instance in which the fund experiences a loss exceeding the corresponding VaR calculation's estimated loss. In a modification from the proposal, the rule will permit a fund to perform this analysis on a weekly instead of a daily basis, comparing the fund's daily gain and loss to the estimated VaR for each business day in the week. This requirement is designed to require a fund to monitor the effectiveness of its VaR model.²¹²

Commenters indicated general support for the backtesting requirement but provided mixed views regarding the frequency of backtesting.²¹³ Several commenters noted that they currently use backtesting as an effective tool in their risk management framework.²¹⁴ We continue to believe that backtesting is important for funds to monitor the effectiveness of their VaR models. The backtesting requirements we are adopting will assist a fund in confirming the appropriateness of its model and related assumptions and help identify when a fund should consider model adjustments.

Several commenters, however, supported decreasing the frequency of backtesting from the proposed daily requirement. Some commenters supported a weekly requirement.²¹⁵ Several other commenters supported a monthly requirement, with some of these commenters identifying

²¹¹ See rule 18f-4(c)(1)(iv).

²¹² As we explained in the Proposing Release, if 10 or more exceptions are generated in a year from backtesting that is conducted using a 99% confidence level and over a one-day time horizon, and assuming 250 trading days in a year, it is statistically likely that such exceptions are a result of a VaR model that is not accurately estimating VaR. *See, e.g.*, Philippe Jorion, *Value at Risk: The New Benchmark for Managing Financial Risk* (3d ed. 2006), at 149-150; *see also* rule 15c3-1e under the Exchange Act (requiring backtesting of VaR models and the use of a multiplication factor based on the number of backtesting exceptions).

²¹³ *See, e.g.*, J.P. Morgan Comment Letter; AQR Comment Letter I; Morningstar Comment Letter.

²¹⁴ *See, e.g.*, J.P. Morgan Comment Letter; MFDF Comment Letter (observing that stress testing and backtesting are critical for the operation of the rule).

²¹⁵ Fidelity Comment Letter; PIMCO Comment Letter.

compliance efficiencies that could result for advisers to UCITS funds, which conduct backtesting on a monthly basis.²¹⁶ Commenters urging less frequent than daily backtesting stated that a less frequent backtesting requirement in the final rule would serve as a baseline, while permitting the derivatives risk manager to adjust the frequency based on the particular needs of the fund.²¹⁷ In supporting weekly backtesting, one commenter stated that it would allow a retroactive comparison of the VaR measure for each business day without incurring the costs and burdens of daily testing.²¹⁸ Several commenters went on to say that backtesting should be looked at on a longer time horizon so that the data is analyzed in the context of more than one day's results.²¹⁹ Additionally, commenters stated that daily testing does not provide enough data on its own for model validation to allow a derivatives risk manager to adjust a fund's VaR model, and therefore the rule should incorporate a less-frequent backtesting requirement.²²⁰ For example, in order to alter a VaR model, some commenters stated that in addition to backtesting, the fund must consider market trends, risk factors assessed by the risk team, a formal review by the model risk governance committee and approval by a risk forum.²²¹ In light of these critiques, commenters stated that the value of daily backtesting is not justified by the costs and burdens of implementing the requirement.²²²

In considering these comments, we agree that daily backtesting may not be necessary for funds to gather the information needed in order for a fund to readily and efficiently adjust or calibrate its VaR calculation model. We are therefore requiring funds to conduct backtesting on a

²¹⁶ Dechert Comment Letter I; T. Rowe Price Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter; *see also* CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (July 28, 2010) ("UCITS Guidelines") Section 3.6.4, *available at* <https://www.fsc.gi/uploads/legacy/download/ucits/CESR-10-788.pdf>.

²¹⁷ Dechert Comment Letter I; T. Rowe Price Comment Letter; SIFMA AMG Comment Letter.

²¹⁸ PIMCO Comment Letter.

²¹⁹ PIMCO Comment Letter; Dechert Comment Letter I ("VaR backtesting could provide more meaningful results if smoothed by a longer period of data points.").

²²⁰ Dechert Comment Letter I; J.P. Morgan Comment Letter; ICI Comment Letter; PIMCO Comment Letter.

²²¹ J.P. Morgan Comment Letter; ICI Comment Letter.

²²² *See, e.g.,* Dechert Comment Letter I; PIMCO Comment Letter.

weekly, rather than a daily, basis (taking into account the fund's gain and loss on each business day that occurred during the weekly backtesting period).²²³ This will ensure that funds collect backtesting data for each business day, while also providing funds with the added flexibility of only running the test weekly. We believe this requirement addresses commenters' concerns while still ensuring that funds gather necessary data for VaR data calibration and derivatives risk management and conduct backtesting analyses to analyze the VaR model's effectiveness at least weekly.

We have not, however, revised the rule to provide for monthly backtesting as some commenters suggested. Although the costs of weekly backtesting will likely be marginally higher than the costs of less-frequent backtesting, we believe that any additional costs associated with a weekly backtesting requirement will be limited because a fund will be required to calculate its portfolio VaR each business day to satisfy the limits on fund leverage risk.²²⁴ We believe the limited additional costs for weekly backtesting relative to monthly testing are justified by the benefits of providing more-recent information regarding the effectiveness of a fund's VaR model. We therefore are requiring weekly backtesting to provide derivatives risk managers more-current information regarding the effectiveness of the fund's VaR model, in line with the requirement under the final rule for weekly stress testing.

Under the final rule, the derivatives risk manager may alter the frequency of backtesting, so long as the frequency is no less frequent than weekly.²²⁵ While backtesting may not provide the only information that a derivatives risk manager should take into account when adjusting a fund's VaR model, we believe it is an important tool for funds to use in validating and adjusting a fund's VaR model. The derivatives risk management program may incorporate additional elements that the derivatives risk manager may find important when assessing whether the fund's VaR model should be adjusted. Market trends, additional risk factors, formal reviews by a model

²²³ Rule 18f-4(c)(1)(iv).

²²⁴ See *infra* section III.C.1.

²²⁵ Rule 18f-4(c)(1)(iv).

risk governance committee, and approval by a risk forum may be factors that a derivatives risk manager would choose to incorporate into the derivatives risk management program.

e. Internal Reporting and Escalation

The final rule will require a fund's derivatives risk management program to address internal reporting and escalation. Specifically, the program must identify the circumstances under which persons responsible for portfolio management will be informed regarding the operation of the program, including guidelines exceedances and the results of the fund's stress testing.²²⁶ The final rule also specifies that a fund's derivatives risk manager must also directly inform the fund's board, as appropriate, of material risks arising from the fund's derivatives use, including risks that exceedances of the guidelines and results of the fund's stress tests indicate.²²⁷ We are adopting these requirements as proposed.

The internal reporting and escalation requirements will require communication between a fund's risk management and portfolio management regarding the operation of the program. We continue to believe that these lines of communication are a key part of derivatives risk management.²²⁸ Providing portfolio managers with the insight of a fund's derivatives risk manager is designed to inform portfolio managers' execution of the fund's strategy and recognize that portfolio managers will generally be responsible for transactions that could mitigate or address derivatives risks as they arise. The rule also will require communication between a fund's derivatives risk manager and its board, as appropriate. We understand that funds today often have a dialogue between risk professionals and fund boards. Requiring a dialogue between a fund's derivatives risk manager and the fund's board provides the fund's board with key information to facilitate its oversight function.

²²⁶ Rule 18f-4(c)(1)(v)(A).

²²⁷ Rule 18f-4(c)(1)(v)(B). For example, an unexpected risk may arise due to a sudden market event, such as a downgrade of an investment bank that is a substantial derivatives counterparty to the fund.

²²⁸ See 2011 IDC Report, *supra* footnote 124.

No commenters opposed the proposed requirements, and the Commission received one comment supporting the proposed internal reporting and escalation requirements. This commenter appreciated that the proposed rule for reporting and escalation requirements did not prescribe criteria or thresholds for discussion or escalation.²²⁹ We agree that the internal reporting and escalation program requirement should be principles-based. In light of the breadth of funds' differing strategies and the variety of ways in which we anticipate funds will manage their derivatives risks, we believe that funds should have flexibility when implementing this program requirement.

Several commenters requested clarification regarding what the particular standard for escalating material risks should be under the rule. While the rule requires the derivatives risk manager to inform portfolio managers in a timely manner of material risks arising from the fund's derivatives transactions, the derivatives risk manager has flexibility to inform the board about these material risks "as appropriate." Some commenters urged the Commission to adopt backstops to ensure that funds do not set reporting and escalation standards too low, potentially leading to the escalation of day-to-day issues or over-reporting.²³⁰ One commenter stated that the derivatives risk manager should not have discretion regarding which material risks should be escalated to the board, and that all material risks should be escalated.²³¹ Another commenter stated that the derivatives risk manager should determine escalation based on a good faith determination.²³² Some commenters stated that exceedances should only be reported when they are material and not remediated promptly (suggesting within five business days) unless the

²²⁹ J.P. Morgan Comment Letter. *But see* Comment Letter of North American Securities Administrators Association, Inc. (Mar. 27, 2020) ("NASAA Comment Letter") (while not clearly addressing the escalation requirement, urging that the Commission require immediate board reporting when a fund "exceeds the maximum [VaR] threshold during backtesting"). Because a fund is expected to experience a given number of backtesting exceedances, we do not believe it would be appropriate to require a derivatives risk manager to report every such exceedance to a fund's board. *See also infra* footnotes 282-283 and accompanying text.

²³⁰ CFA Comment Letter; ABA Comment Letter; J.P. Morgan Comment Letter.

²³¹ Morningstar Comment Letter.

²³² NYC Bar Comment Letter.

results show material weaknesses.²³³ This commenter went on to state that the reporting and escalation requirements should be tailored based on the fund's size, sophistication, and needs.²³⁴ One commenter urged that that the Commission permit funds' boards to work with derivatives risk managers to establish policies and procedures outlining under what circumstances such risks should be communicated.²³⁵ Another commenter, while broadly supporting a derivatives risk manager's ability to communicate material risks directly to the board, similarly stated that the board should work together with the derivatives risk manager to define the circumstances under which the manager would communicate an issue to the fund board.²³⁶

We continue to believe that the derivatives risk manager should have discretion to determine, as appropriate, when and what material risks escalated to the fund's portfolio management also should be escalated to the board of directors. We believe that a fund's derivatives risk manager is best positioned to determine when it is appropriate to inform the fund's portfolio management and board of material risks. The final rule provides flexibility for the derivatives risk manager to calibrate the escalation framework to suit the needs of the fund and to avoid the over-reporting concern some commenters identified. We agree that the escalation requirements for the fund should be tailored based on the fund's size, sophistication, and needs and believe that these would be appropriate factors for the derivatives risk manager to consider in establishing the fund's escalation requirements.²³⁷ In addition, the rule does not limit a board's ability to engage with the derivatives risk manager on the circumstances under which risks will be communicated to the board. This engagement may help a derivatives risk manager develop an understanding of risks that the board would find most salient, or important to raise outside of a regularly scheduled board meeting.²³⁸

²³³ SIFMA AMG Comment Letter.

²³⁴ *Id.*

²³⁵ Dechert Comment Letter I.

²³⁶ MFDF Comment Letter.

²³⁷ *See* SIFMA AMG Comment Letter.

²³⁸ The final rule also requires a fund's derivatives risk manager to provide certain reports to the fund's board at a frequency determined by the board. Rule 18f-4(c)(3)(iii).

f. Periodic Review of the Program

The final rule requires a fund's derivatives risk manager to review the program at least annually to evaluate the program's effectiveness and to reflect changes in the fund's derivatives risks over time.²³⁹ The review applies to the overall program, including each of the specific program elements discussed above. The periodic review must include a review of the fund's VaR calculation model and any designated reference portfolio to evaluate whether it remains appropriate. We did not receive any comments on this requirement and are adopting it as proposed apart from conforming changes to reflect modifications to the final rule's relative VaR test.

We continue to believe that the periodic review of a fund's program and VaR calculation model is necessary to determine whether the fund is appropriately addressing its derivatives risks. A fund's derivatives risk manager, as a result of the review, could determine whether the fund should update its program, its VaR calculation model, or any designated reference portfolio.²⁴⁰ The rule does not prescribe review procedures or incorporate specific developments that a derivatives risk manager must consider as part of its review. We believe a derivatives risk manager generally should implement periodic review procedures for evaluating regulatory, market-wide, and fund-specific developments affecting the fund's program so that it is well positioned to evaluate the program's effectiveness.

We believe that a fund should conduct this review on at least an annual basis, because derivatives and fund leverage risks, and the means by which funds evaluate such risks, can change. The rule requires at least an annual review so that there would be a recurring dialogue between a fund's derivatives risk manager and its board regarding the implementation of the program and its effectiveness. This frequency also mirrors the minimum period in which the fund's derivatives risk manager would be required to provide a written report on the

²³⁹ Rule 18f-4(c)(1)(vi).

²⁴⁰ The periodic review requirement applies to a fund's designated reference portfolio, rather than a designated reference index as proposed, because the final rule permits a fund to use either a designated index or its securities portfolio as the fund's reference portfolio for the relative VaR test, subject to conditions.

effectiveness of the program to the board. A fund's derivatives risk manager could, however, determine that more frequent reviews are appropriate based on the fund's particular derivatives risks, the fund's policies and procedures implementing the program, market conditions, or other facts and circumstances.²⁴¹

C. Board Oversight and Reporting

The final rule will require: (1) a fund's board of directors to approve the designation of the fund's derivatives risk manager; and (2) the derivatives risk manager to provide regular written reports to the board regarding the program's implementation and effectiveness, and analyzing exceedances of the fund's guidelines and the results of the fund's stress testing.²⁴² We are adopting these requirements with some modifications from the proposal, as we describe in more detail below.

The final rule's requirements regarding board oversight and reporting are designed to further facilitate the board's oversight of the fund's derivatives risk management. We believe that directors should understand the program and the derivatives risks it is designed to manage as well as participate in determining who should administer the program. They also should ask questions and seek relevant information regarding the adequacy of the program and the effectiveness of its implementation. Therefore, we believe that the board should inquire about material risks arising from the fund's derivatives transactions and follow up regarding the steps the fund has taken to address such risks and any change in those risks over time. To facilitate the board's oversight, the rule will require the fund's derivatives risk manager to provide reports to the board.

The Commission received many comments, as discussed throughout this section, regarding the role of the board in overseeing a fund's derivatives risk management program. In addition to the comments on the specific requirements of the rule regarding board approval of the

²⁴¹ See also rule 18f-4(c)(2)(iii)(A) (requiring, for a fund that is not in compliance with the applicable VaR test within five business days, the derivatives risk manager to report to the fund's board of directors and explain how and by when (*i.e.*, number of business days) the derivatives risk manager reasonably expects that the fund will come back into compliance).

²⁴² Rule 18f-4(c)(3).

derivatives risk manager and regarding board reports, the Commission received comments regarding the role of the board more broadly. Specifically, commenters requested that the Commission provide guidance reiterating that the board’s role is one of oversight and that the board members may exercise their reasonable business judgment in overseeing a fund’s program.²⁴³ We believe the role of the board under the rule is one of general oversight, and consistent with that obligation, we expect that directors will exercise their reasonable business judgment in overseeing the program on behalf of the fund’s investors.²⁴⁴

We continue to believe that the board should view oversight as an iterative process. Several commenters expressed concern over the use of the word “iterative” when describing the oversight role of the board.²⁴⁵ These commenters suggested that this word implies that the Commission expects the board to act in a management capacity, similar to the derivatives risk manager. The use of the word “iterative” is not intended to imply that the board is responsible for the day-to-day management of the fund’s derivatives risk, but is instead intended to clarify that the board’s oversight role requires regular engagement with the derivatives risk management program rather than a one-time assessment. We continue to believe that the board’s role should be an active one that involves inquiry into material risks arising from the fund’s derivatives transactions and follow-up regarding the steps the fund has taken to address such risks, including as those risks may change over time. Effective board oversight depends on the board receiving sufficient information on a regular basis to remain abreast of the specific derivatives risks that the fund faces. Boards should request follow-up information when appropriate and take

²⁴³ See, e.g., Dechert Comment Letter I; Invesco Comment Letter; T. Rowe Price Comment Letter; MFDF Comment Letter; ICI Comment Letter. Commenters discussed the board’s role under other of the Commission’s rules—in particular, rule 22e-4 and rule 38a-1—in making observations and suggestions about the board’s oversight role in the context of funds’ derivatives risk management. See SIFMA AMG Comment Letter; BlackRock Comment Letter; Capital Group Comment Letter.

Commenters also requested that the Commission clarify that the board’s role does not exceed standards under state law, standards in Release 10666, rule 22e-4, and rule 38a-1. See Dechert Comment Letter I; ICI Comment Letter; SIFMA AMG Comment Letter.

²⁴⁴ See Investment Company Liquidity Risk Management Programs, Investment Company Act Release No. 32315 (Oct. 13, 2016) [81 FR 82142 (Nov. 18, 2016)], at section III.H.

²⁴⁵ ICI Comment Letter; IDC Comment Letter; Capital Group Comment Letter.

reasonable steps to see that matters identified are addressed. Whether a board requests follow-up information, however, will depend on the facts and circumstances. As one commenter noted, “[d]epending on the circumstances, regular follow-up may or may not be necessary, as the reports provided to the board may already contain sufficient information, or the matter may have been resolved.”²⁴⁶

A fund’s board also will be responsible for overseeing a fund’s compliance with rule 18f-4. Rule 38a-1 under the Investment Company Act requires a fund’s board, including a majority of its independent directors, to approve policies and procedures reasonably designed to prevent violation of the federal securities laws by the fund and its service providers.²⁴⁷ Rule 38a-1 provides for oversight of compliance by the fund’s adviser and other service providers through which the fund conducts its activities. Rule 38a-1 would encompass a fund’s compliance obligations with respect to rule 18f-4.

1. Board Approval of the Derivatives Risk Manager

The rule requires a fund’s board, including a majority of directors who are not interested persons of the fund, to approve the designation of the fund’s derivatives risk manager.²⁴⁸ We are adopting this provision with one modification from the proposal, as discussed below.²⁴⁹

Some commenters expressed concern regarding the role of the board in selecting the derivatives risk manager. Several commenters stated that the fund’s adviser—and not its board—should select the derivatives risk manager.²⁵⁰ Similarly, some commenters stated that requiring the board to select the derivatives risk manager is a management function that should be outside

²⁴⁶ IDC Comment Letter.

²⁴⁷ See rule 38a-1 under the Investment Company Act; Compliance Programs of Investment Companies and Investment Advisers, Investment Company Act Release No. 26299 (Dec. 17, 2003) [68 FR 74714 (Dec. 24, 2003)] (“Compliance Program Release”) (discussing the adoption and implementation of policies and procedures required under rule 38a-1).

²⁴⁸ Rule 18f-4(c)(3)(i).

²⁴⁹ Proposed rule 18f-4(c)(5)(i).

²⁵⁰ Dechert Comment Letter I; MFDF Comment Letter; T. Rowe Price Comment Letter; SIFMA AMG Comment Letter; ABA Comment Letter.

the scope of board responsibilities.²⁵¹ Commenters stated that the selection process for approving a specific person or persons to serve as the derivatives risk manager would be unduly burdensome for the board.²⁵² On the other hand, one commenter stated that the proposed approval requirement was among several responsible measures in the proposal, but expressed concern that the proposal would not ensure appropriate independence of the derivatives risk manager.²⁵³

We continue to believe that requiring the board to designate the derivatives risk manager is important to establish the foundation for an effective relationship and line of communication between a fund's board and its derivatives risk manager.²⁵⁴ While the derivatives risk manager is responsible for administering the fund's derivatives risk management program, we believe it is important that the board, in its oversight role, remains engaged with the program by designating a qualified derivatives risk manager who will have a direct reporting line to the board. We believe that a fund's board, in its oversight role, is well-positioned to consider a prospective derivatives risk manager based on all the facts and circumstances relevant to the fund in considering whether to approve the derivatives risk manager's designation, including the derivatives risks particular to the fund.

In response to commenters who suggested that the adviser to the fund is in the best position to evaluate a candidate, we agree that the adviser could play a role in putting forward derivatives risk manager candidates for the board's consideration.²⁵⁵ The final rule requires that the board approve the designation of the fund's derivatives risk manager but does not preclude the adviser from participating in the selection process. We anticipate that boards generally would request that the adviser carry out due diligence on appropriate candidates and articulate the

²⁵¹ IDC Comment Letter; T. Rowe Price Comment Letter.

²⁵² Dechert Comment Letter I; IDC Comment Letter.

²⁵³ Better Markets Comment Letter.

²⁵⁴ *Cf.* rules 22e-4 and 38a-1 under the Investment Company Act.

²⁵⁵ MFDF Comment Letter; T. Rowe Price Comment Letter; *see also supra* section II.B.1 (discussing the selection of the derivatives risk manager).

qualifications of the candidate(s) that the adviser puts forward to the board.²⁵⁶ The adviser to the fund could, for example, nominate potential candidates, review resumes, conduct initial interviews, and articulate the adviser's view of the candidate. We acknowledge that the selection of the derivatives risk manager has attendant burdens, but nevertheless think it appropriate that the final rule require the board to exercise oversight by designating the derivatives risk manager.

Comments on the proposed requirement that the fund's board consider relevant experience in managing derivatives risk when selecting the derivatives risk manager were mixed. Some commenters expressed support for this proposed requirement.²⁵⁷ In contrast, several commenters stated that the board should not be required to take into account the relevant experience of managing derivatives risk.²⁵⁸ One commenter stated that if the board is responsible for selecting the derivatives risk manager, the board should have flexibility in determining what experience it believes is relevant.²⁵⁹

After considering comments, we are removing the specific requirement in the proposal that the fund's board "tak[e] into account the derivatives risk manager's relevant experience regarding the management of derivatives risk" when approving the designation of the derivatives risk manager. The definition of "derivatives risk manager" requires the person fulfilling the role to have "relevant experience regarding the management of derivatives risk."²⁶⁰ We believe that a fund board's consideration of a candidate to serve as a derivatives risk manager necessarily would take into account the candidate's experience, among all other relevant factors, and that a specific requirement in the final rule requiring the board to take the candidate's experience into account is unnecessary.

²⁵⁶ See J.P. Morgan Comment Letter; Dechert Comment Letter I; MFDF Comment Letter; ABA Comment Letter.

²⁵⁷ J.P. Morgan Comment Letter; NYC Bar Comment Letter.

²⁵⁸ Dechert Comment Letter I; Fidelity Comment Letter; ICI Comment Letter; IDC Comment Letter.

²⁵⁹ MFDF Comment Letter. Some commenters also requested additional clarity about what experience would be considered "relevant" in the context of selecting a derivatives risk manager. See *supra* paragraph accompanying footnotes 157-158.

²⁶⁰ Rule 18f-4(a).

2. Board Reporting

The rule will require the derivatives risk manager to provide a written report on the effectiveness of the program to the board at least annually and also to provide regular written reports at a frequency determined by the board.²⁶¹ This requirement is designed to facilitate the board's oversight role, including its role under rule 38a-1.²⁶² As discussed below, we are adopting these reporting obligations with some modifications from the proposal.

The Commission received many comments regarding the type and amount of information that is required to be submitted to boards under the board reporting obligations. Specifically, commenters stated their concern that the amount of information that the derivatives risk manager would submit to the board under the proposal may shift the board's role from one of oversight to day-to-day risk management.²⁶³ Some commenters similarly stated their concern that the proposed rule suggests that board members should have a more substantive knowledge of derivatives risks than is reasonable to expect for board members serving in an oversight capacity.²⁶⁴

We agree with commenters that the board's role is distinct from that of the derivatives risk manager and is not one that requires the board to be involved in the day-to-day management of the fund. It is the derivatives risk manager, not the board, that is responsible for having sufficient derivatives experience to administer the derivatives risk management program. The final rule does not place day-to-day responsibility for the fund's derivatives risk management on a fund's board. Board oversight should not, however, be a passive activity. We continue to believe that the board reporting requirements, discussed below, are important to facilitate the board's oversight role. In order for the board members to fulfil their oversight role—and in light of the fact that funds required to establish a program use derivatives more extensively— we

²⁶¹ Rule 18f-4(c)(3)(ii) and (iii).

²⁶² See Compliance Program Release, *supra* footnote 247, at n.33 and accompanying text.

²⁶³ Dechert Comment Letter I; T. Rowe Price Comment Letter; MFDF Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter; ABA Comment Letter.

²⁶⁴ ICI Comment Letter; ProShares Comment Letter; ABA Comment Letter.

believe that it is critically important for a board to be informed of certain derivatives risks faced by the fund. Consistent with that view, we believe that directors should understand the program and the derivatives risks it is designed to manage. They also should ask questions and seek relevant information regarding the adequacy of the program and the effectiveness of its implementation. The board reporting requirements are designed to equip board members with the information they need to provide effective oversight, including their oversight responsibilities under rule 38a-1.

Reporting on Program Implementation and Effectiveness

The rule will require a fund's derivatives risk manager to provide to the fund's board, on or before the implementation of the program and at least annually thereafter, a written report providing a representation that the program is reasonably designed to manage the fund's derivatives risks and to incorporate the required elements of the program.²⁶⁵ The report must include the basis for the derivatives risk manager's representation along with such information as may be reasonably necessary to evaluate the adequacy of the fund's program and the effectiveness of its implementation. The representation may be based on the derivatives risk manager's reasonable belief after due inquiry. A derivatives risk manager, for example, could form its reasonable belief based on an assessment of the program and taking into account input from fund personnel, including the fund's portfolio management, or data that third parties provide. Additionally, the written report must include, as applicable, the fund's derivatives risk manager's basis for the approval of the designated reference portfolio (or any change in the designated reference portfolio) used under the relative VaR test; or an explanation of the basis for the derivatives risk manager's determination that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test such that the fund relied on the absolute VaR test instead.²⁶⁶ These requirements are designed to provide a fund's board with information about the effectiveness and implementation of the program so that the

²⁶⁵ Rule 18f-4(c)(3)(ii).

²⁶⁶ See *infra* section II.D.2.b.

board may appropriately exercise its oversight responsibilities, including its role under rule 38a-1. We are adopting these requirements substantially as proposed, with some modifications as discussed below.

Commenters generally supported the derivatives risk manager providing to the fund's board, on or before implementation of the program, and at least annually thereafter, an annual report regarding the program's design.²⁶⁷ One commenter specifically supported the requirement that the derivatives risk manager determine whether the program is operating effectively.²⁶⁸ Several commenters, however, suggested modifications to this proposed reporting requirement, expressing concern about the requirement for the derivatives risk manager to make affirmative representations regarding the program due to the burden this would impose.²⁶⁹ For example, one commenter stated that the reporting requirement should be replaced by a written report, provided at least annually, that addresses operations, adequacy and effectiveness of implementation, and discloses any material changes to the program.²⁷⁰

We continue to believe that a derivatives risk manager's affirmative representation that the program is reasonably designed to manage the fund's derivatives risks, incorporating each of the program elements that rule 18f-4 requires, is appropriate to provide the board with the information they need to understand the effectiveness and content of the derivatives risk program. The final rule includes this requirement—rather than a requirement that the board approve the derivatives risk management program, for example—because we believe that the derivatives risk manager, rather than the board, is best positioned to make the determinations underlying the affirmative representations. Requiring the derivatives risk manager to include the

²⁶⁷ See, e.g., J.P. Morgan Comment Letter; ICI Comment Letter; Invesco Comment Letter.

²⁶⁸ MFDF Comment Letter.

²⁶⁹ Dechert Comment Letter I; Invesco Comment Letter; T. Rowe Price Comment Letter; MFDF Comment Letter.

²⁷⁰ Invesco Comment Letter.

information in a board report will also reinforce that the fund and its adviser are responsible for derivatives risk management while the board's responsibility is to oversee this activity.²⁷¹

One commenter expressed concern regarding the requirement that the board report include "such information as may be reasonably necessary to evaluate the adequacy of the fund's program and the effectiveness of its implementation."²⁷² The commenter supported the rule not requiring the board to make these specific findings and was concerned that this reporting requirement could imply a board obligation to make the findings. This reporting requirement applies to the content of the board reports and is designed to facilitate the board's oversight role, including its role under rule 38a-1. This requirement does not imply any obligation for a board to make any particular findings.

One commenter who supported the proposed requirement that the written report provide the basis for the derivatives risk manager's selection of the designated index also suggested that the board report include the basis for any change in the index.²⁷³ We agree that the basis for a change in a designated reference portfolio that the fund uses in complying with the relative VaR test may be just as important to understanding the operation of the relative VaR test as the basis for a designated reference portfolio's initial approval.²⁷⁴ Accordingly, in a clarifying change from the proposal, the derivatives risk manager will also be required to include in the report the basis for any change in the designated reference portfolio as well as the basis for the approval of

²⁷¹ One commenter stated that the rule should not require or suggest through an affirmative representation obligation that the derivatives risk manager is certifying or guaranteeing the effectiveness of a fund's program to manage derivatives risks, even if subject to a reasonableness standard and based upon due inquiry. *See* Invesco Comment Letter. The rule does not require or suggest any such certification or guarantee.

²⁷² MFDF Comment Letter.

²⁷³ Invesco Comment Letter; *see also infra* footnote 319 (discussing the use of the proposed term "designated reference index" and the final rule's definition of "designated index," and stating that, for consistency with the final rule, we discuss comments received about the designated reference index as comments about the designated index).

²⁷⁴ This could include either a change from one designated index to another, or a determination to change from using a designated index to using the fund's own securities portfolio in complying with the relative VaR test (or, vice versa, a change from using the fund's securities portfolio to using a designated index). *See infra* section II.D.2.b.

a designated reference portfolio.²⁷⁵ The derivatives risk manager's approval of a particular designated reference portfolio or approval of a change in that portfolio, or a determination that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, can affect the amount of leverage risk a fund may obtain under the final rule. We therefore believe it is important that a fund's board have sufficient information to oversee this aspect of the fund's derivatives risk management.

Regular Board Reporting

The rule requires a fund's derivatives risk manager to provide to the fund's board, at a frequency determined by the board, written reports analyzing exceedances of the fund's risk guidelines and the results of the fund's stress tests and backtesting.²⁷⁶ These reports must include information reasonably necessary for the board to evaluate the fund's response to exceedances and the results of the fund's stress testing. We are adopting this provision with some modification from the proposal, as discussed below. Requiring the derivatives risk manager to provide information about how the fund performed relative to these measures and at a board-determined frequency is designed to provide the board with timely information to facilitate its oversight of the fund and the operation of the program.

The Commission received several comments expressing general support for the proposed requirement that the derivatives risk manager provide regular reports to the board.²⁷⁷ Commenters expressed concerns, however, regarding both the frequency of board reporting and the detail required to be included in each report. Specifically, one commenter stated that the Commission's rules should require only an annual report and allow the board and the derivatives risk manager to determine the content and format of the report.²⁷⁸

²⁷⁵ The final rule also refers to a fund's designated reference portfolio, rather than its designated reference index as proposed, because the final rule permits a fund to use either a designated index or its securities portfolio as the fund's reference portfolio for the relative VaR test, subject to conditions.

²⁷⁶ Rule 18f-4(c)(3)(iii).

²⁷⁷ See e.g. J.P. Morgan Comment Letter; ICI Comment Letter; Invesco Comment Letter; MFDF Comment Letter.

²⁷⁸ ICI Comment Letter.

We are adopting as proposed the requirement that the derivatives risk manager provide reports to the board at a frequency determined by the board. This aspect of the rule will provide the board with discretion in setting the frequency of reporting. We believe it is important that the board determines for itself how frequently it will receive these reports. This flexibility will permit boards to tailor their oversight to funds' particular facts and circumstances. We also understand that many fund advisers today provide regular reports to fund boards, often in connection with quarterly board meetings, regarding a fund's use of derivatives and their effects on a fund's portfolio, among other information.

Commenters expressed concern regarding the amount of detail that should be included in board reports, with many requesting clarification that the regular board reporting include summaries of guidelines exceedances, stress testing, and backtesting (as opposed to a greater degree of detail). For example, one commenter noted that receiving the results of stress testing and backtesting in summary form are "critical for the operation of the rule."²⁷⁹ Several commenters suggested the board reports provide executive summaries.²⁸⁰ Commenters stated that executive summaries would ensure that boards are not overly inundated with details and technical determinations.²⁸¹ Some commenters specifically supported a rule that does not require every stress testing or backtesting exceedance be reported to the board, preferring the use of summaries instead.²⁸²

In a change from the proposal, and to clarify the scope of this reporting obligation in the rule in response to commenters' concerns, the rule we are adopting does not specify the board must receive a report of "any" exceedances of the risk guidelines.²⁸³ This change is designed to clarify that the derivatives risk manager need not report every single exceedance to the board.

²⁷⁹ MFDF Comment Letter.

²⁸⁰ Dechert Comment Letter I; T. Rowe Price Comment Letter; ICI Comment Letter; IDC Comment Letter; Capital Group Comment Letter.

²⁸¹ *See, e.g.*, ICI Comment Letter.

²⁸² J.P. Morgan Comment Letter; T. Rowe Price Comment Letter; ICI Comment Letter; IDC Comment Letter; Capital Group Comment Letter; Dechert Comment Letter I.

²⁸³ *See* rule 18f-4(c)(3)(iii); *see also* proposed rule 18f-4(c)(5)(iii).

Instead, the reports to the board must include an *analysis* of exceedances that occurred during the period covered by the report, as well as stress testing and backtesting conducted during the period. The written report reflecting this analysis could be in summary form, rather than an itemization of each exceedance, stress test, or backtest exception. As the Commission stated in the Proposing Release, and as clarified by our changes in the final rule, a simple listing of exceedances and stress testing and backtesting results without context, in contrast to an analysis of these matters, would provide less useful information for a fund's board and would not satisfy the requirement that the reports include such information as may be reasonably necessary for the board of directors to evaluate the fund's response to exceedances and the results of the fund's stress testing.

D. Limit on Fund Leverage Risk

Consistent with the proposal, the final rule will generally require funds relying on the rule when engaging in derivatives transactions to comply with a VaR-based limit on fund leverage risk.²⁸⁴ This outer limit is based on a relative VaR test that compares the fund's VaR to the VaR of a "designated reference portfolio." A fund can use an index that meets certain requirements or its own investments, excluding derivatives transactions, as its designated reference portfolio. If the fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, the fund will be required to comply with an absolute VaR test.²⁸⁵ A fund will satisfy the relative VaR test if its portfolio VaR does not exceed 200% of the VaR of its designated reference portfolio and will satisfy the absolute VaR test if its portfolio VaR does not exceed 20% of the value of the fund's net assets. The final rule also provides relative and absolute VaR limits of 250% and 25%, respectively, for closed-end funds that have issued to investors and have outstanding shares

²⁸⁴ See rule 18f-4(c)(2); see also proposed rule 18f-4(c)(2).

²⁸⁵ The final rule provides an exception from the rule's VaR test for limited derivatives users. See *infra* section II.E. In a change from the proposal, the final rule does not provide an exception for funds that met the proposed sales practices rule's definition of a leveraged/inverse investment vehicle. See *infra* section II.F.

of a senior security that is a stock.²⁸⁶ We discuss each aspect of the limit on fund leverage risk below.

1. Use of VaR

VaR is an estimate of an instrument's or portfolio's potential losses over a given time horizon and at a specified confidence level. VaR will not provide, and is not intended to provide, an estimate of an instrument's or portfolio's maximum loss amount. For example, if a fund's VaR calculated at a 99% confidence level was \$100, this means the fund's VaR model estimates that, 99% of the time, the fund would not be expected to lose more than \$100. However, 1% of the time, the fund would be expected to lose more than \$100, and VaR does not estimate the extent of this loss.

Many commenters expressed support for the use of VaR as the rule's means of providing an outside limit on fund leverage risk.²⁸⁷ Commenters identified benefits of using VaR in the rule, including many of the benefits the Commission identified in the Proposing Release.²⁸⁸ For example, commenters observed that VaR enables risk to be measured in a reasonably comparable and consistent manner across diverse types of instruments and provides an adequate overall indication of market risk.²⁸⁹ One commenter highlighted VaR as an analytic metric with broad utilization across the financial services sector.²⁹⁰ Others stated more generally that VaR is time tested and a familiar risk-analytics tool.²⁹¹

²⁸⁶ In this release, we refer to shares of a class of senior security that is a stock as “preferred stock.”

²⁸⁷ See, e.g., ICI Comment Letter; BlackRock Comment Letter; Fidelity Comment Letter; Comment Letter of Franklin Resources, Inc. (Apr. 23, 2020) (“Franklin Comment Letter”); J.P. Morgan Comment Letter; SIFMA AMG Comment Letter; Comment Letter of the Managed Funds Association and Alternative Investment Management Association (Apr. 30, 2020) (“MFA Comment Letter”); Comment Letter of Eaton Vance Corp. (May 1, 2020) (“Eaton Vance Comment Letter”); Putnam Comment Letter; Vanguard Comment Letter.

²⁸⁸ See Proposing Release, *supra* footnote 1, at section II.D.1 for a discussion of the benefits of VaR in the context of proposed rule 18f-4.

²⁸⁹ See, e.g., ICI Comment Letter; BlackRock Comment Letter; J.P. Morgan Comment Letter.

²⁹⁰ See Franklin Comment Letter.

²⁹¹ See Franklin Comment Letter; Vanguard Comment Letter; Chamber Comment Letter. As the Commission observed in the Proposing Release, VaR calculation tools are widely available, and many advisers that enter into derivatives transactions—and particularly those that would not qualify as limited derivatives users—already use risk management or portfolio management

The Commission recognized in the Proposing Release that VaR is not itself a leverage measure.²⁹² But a VaR test, and especially one that compares a fund's VaR to an unleveraged reference portfolio that reflects the markets or asset classes in which the fund invests, can be used to analyze whether a fund is using derivatives transactions to leverage the fund's portfolio, magnifying its potential for losses and significant payment obligations of fund assets to derivatives counterparties. At the same time, VaR tests can also be used to analyze whether a fund is using derivatives with effects other than leveraging the fund's portfolio that may be less likely to raise the concerns underlying section 18. For example, fixed-income funds use a range of derivatives instruments, including credit default swaps, interest rate swaps, swaptions, futures, and currency forwards. These funds often use these derivatives in part to seek to mitigate the risks associated with a fund's bond investments or to achieve particular risk targets, such as a specified duration. If a fund were using derivatives extensively, but had either a low VaR or a VaR that did not substantially exceed the VaR of an appropriate benchmark, this would indicate that the fund's derivatives were not substantially leveraging the fund's portfolio. One commenter similarly stated that VaR provides helpful information on whether a fund is using derivatives transactions to leverage its portfolio and can be used to analyze whether a fund is using derivatives for other purposes, like hedging its portfolio investments.²⁹³

While we believe there are significant benefits to using a VaR-based limit on fund leverage risk, we recognize, and the Commission discussed in the Proposing Release, risk literature critiques of VaR (especially since the 2007-2009 financial crisis).²⁹⁴ Commenters highlighted concerns with one common critique of VaR: that it does not reflect the size of losses

platforms that include VaR capability. See Proposing Release, *supra* footnote 1, at nn.180-181 and accompanying text.

²⁹² See Proposing Release, *supra* footnote 1, at section II.D.1.

²⁹³ See ICI Comment Letter.

²⁹⁴ See Proposing Release, *supra* footnote 1, at nn.182-187 and accompanying paragraph; Chris Downing, Ananth Madhavan, Alex Ulitsky & Ajit Singh, *Portfolio Construction and Tail Risk*, 42 The Journal of Portfolio Management 1, 85-102 (Fall 2015), available at <https://jpm.ijournals.com/content/42/1/85> ("for especially fat-tailed return distributions the VaR threshold value might appear to be low, but the actual amount of value at risk is high because VaR does not measure the mass of distribution beyond the threshold value").

that may occur on the trading days during which the greatest losses occur—sometimes referred to as “tail risks.”²⁹⁵ A related critique is that VaR calculations may underestimate the risk of loss under stressed market conditions.²⁹⁶ These critiques often arise in the context of discussing risk managers’ use of additional risk tools to address VaR’s shortcomings.

We continue to believe that tests based on VaR are appropriate means to limit fund leverage risk as part of rule 18f-4. As the Commission explained in the Proposing Release, the VaR tests in rule 18f-4 are designed to provide a metric that can help assess the extent to which a fund’s derivatives transactions raise concerns underlying section 18, but we do not believe they should be the sole component of a derivatives risk management program.²⁹⁷ We do not intend to encourage risk managers to over-rely on VaR as a stand-alone risk management tool.²⁹⁸ Instead, the final rule requires a fund to establish risk guidelines and to stress test its portfolio as part of its derivatives risk management program in part because of concerns that VaR as a risk management tool may not adequately reflect tail risks. A fund that adopts a derivatives risk management program under the rule also will have to consider other risks that VaR does not capture (such as counterparty risk and liquidity risk) as part of its derivatives risk management program.²⁹⁹ We believe that the final rule’s derivatives risk management program provides an

²⁹⁵ See, e.g., Better Markets Comment Letter; CFA Comment Letter; Proposing Release, *supra* footnote 1, at n.182 and accompanying text.

With respect to VaR, the “tail” refers to the observations in a probability distribution curve that are outside the specified confidence level. “Tail risk” describes the concern that losses outside the confidence level may be extreme.

²⁹⁶ See Proposing Release, *supra* footnote 1, at n.183 and accompanying text.

²⁹⁷ See *supra* section II.B.2.

²⁹⁸ See, e.g., James O’Brien & Pawel J. Szerszen, *An Evaluation of Bank VaR Measures for Market Risk During and Before the Financial Crisis*, Federal Reserve Board Staff Working Paper 2014-21 (Mar. 7, 2014), available at <https://www.federalreserve.gov/pubs/feds/2014/201421/201421pap.pdf> (“Criticism of banks’ VaR measures became vociferous during the financial crisis as the banks’ risk measures appeared to give little forewarning of the loss potential and the high frequency and level of realized losses during the crisis period.”); see also Pablo Triana, *VaR: The Number That Killed Us*, *Futures Magazine* (Dec. 1, 2010), available at <http://www.futuresmag.com/2010/11/30/var-number-killed-us> (stating that “in mid-2007, the VaR of the big Wall Street firms was relatively quite low, reflecting the fact that the immediate past had been dominated by uninterrupted good times and negligible volatility”).

²⁹⁹ One commenter similarly stated that the VaR tests will be particularly beneficial when used in

effective complement to the VaR tests and, in particular, that the stress testing component of the program will require funds to evaluate the “tail risks” that VaR by its nature does not capture. A fund’s compliance with its VaR test would satisfy the final rule’s outside limit on fund leverage risk but is not a substitute for an effective derivatives risk management program. A fund’s derivatives risk management program is designed to complement the applicable VaR test as well as the fund’s other risk management activities, such as compliance with rule 22e-4 for funds subject to that rule.

We also recognize that there are circumstances where VaR tests may potentially under- or overstate a particular fund’s leverage risk, which may be particularly restrictive for certain funds in idiosyncratic circumstances.³⁰⁰ A fund that believes an alternative means of estimating and limiting its leverage risk would be more effective in accomplishing the Commission’s stated goals in adopting the final rule given these idiosyncratic circumstances, including addressing the concerns underlying section 18, may raise such issues via the exemptive application process. The exemptive application process would allow the Commission to consider, for example, the details of the fund’s derivatives risk management program; the particular circumstances under which the fund believes the final rule’s VaR tests may under- or overstate the fund’s leverage risk; and alternate means of appropriately limiting that leverage risk under such circumstances.

Several commenters suggested alternatives to the proposed VaR test in light of the fact that VaR does not measure “tail” risks. One commenter stated that using VaR as the means of limiting fund leverage risk may create incentives for fund managers to take excessive risks by engaging in derivatives strategies that are “extremely risky under certain conditions but [the conditions are] highly unlikely to occur.”³⁰¹ A few commenters suggested requiring funds to measure expected shortfall or stressed VaR, in addition to complying with the applicable

conjunction with elements of the derivatives risk management program, including stress testing, backtesting, and risk guidelines. *See* BlackRock Comment Letter.

³⁰⁰ *See, e.g.,* Gary Strumeyer, *The Capital Markets: Evolution of the Financial Ecosystem* (2017), at 100.

³⁰¹ *See* CFA Comment Letter.

proposed VaR-based tests, to address this incentive.³⁰² Although we are not adopting a requirement that funds use stressed VaR or expected shortfall, funds may incorporate these methodologies into their derivatives risk management programs. Stressed VaR refers to a VaR model that is calibrated to a period of market stress. A stressed VaR approach would address some of the VaR test critiques related to tail risk and underestimating expected losses during stressed conditions. Calibrating VaR to a period of market stress, however, can pose quantitative challenges by requiring funds to identify a stress period with a full set of risk factors for which historical data is available. We believe that the stress testing required as part of a fund's derivatives risk management program provides an effective means to analyze stressed market conditions without raising the quantitative challenges that would apply if the final rule were to require VaR tests that incorporate stressed VaR calculations that the fund conducts each trading day.

Expected shortfall analysis is similar to VaR, but accounts for tail risk by taking the average of the potential losses beyond the specified confidence level. For example, if a fund's VaR at a 99% confidence level is \$100, the fund's expected shortfall would be the average of the potential losses in the 1% "tail," which are the losses that exceed \$100. Because there are fewer observations in the tail, however, there is an inherent difficulty in estimating the distribution of larger losses. As a result, expected shortfall analysis generally is more sensitive to extreme outlier losses than VaR calculations because expected shortfall is based on an average of a small number of observations that are in the tail. This heightened sensitivity could be disruptive to a fund's portfolio management in the context of the final rule because it could result in large changes in a fund's expected shortfall as outlier losses enter and exit the observations that are in the tail or that are used to model the tail's distribution. For all of these reasons, we are adopting an outside limit on fund leverage risk using VaR, which is commonly used and does not present the same quantitative challenges associated with stressed VaR and expected shortfall,

³⁰² See Better Markets Comment Letter; CFA Comment Letter; *see also infra* paragraphs between text accompanying footnotes 300 and 303 (discussing expected shortfall and stressed VaR).

complemented by elements in the final rule's derivatives risk management program requirement designed to address VaR's limitations.

In addition to concerns about tail risks, one commenter expressed support for limiting fund leverage risk by adopting an exposure-based limit that tracks the approach proposed by the Commission in 2015.³⁰³ This approach would limit the amount of a fund's derivatives use based on the derivatives' gross notional amounts. A limitation based on gross notional amounts would not differentiate between derivatives transactions that have the same notional amount, but whose underlying reference assets differ and entail potentially very different risks. A fund could have a high amount of gross notional exposure without a commensurately high level of risk. Many commenters opposed using a fund's gross notional amounts as a means of providing an outside limit on fund leverage risk.³⁰⁴

After considering comments, we continue to believe that a VaR-based approach is a better means of limiting fund leverage risk because, unlike notional amounts which do not measure risk or leverage, VaR enables risk to be measured in a reasonably comparable and consistent manner, as well as other benefits highlighted by the Commission and many commenters discussed above. We believe that the risk-based approach in the final rule, which relies on VaR, stress testing, and overall risk management, effectively will address concerns about fund leverage risk underlying section 18, while also allowing funds to continue to use derivatives for a variety of purposes. We recognize that an exposure-based approach can be useful, and that it can be a more straightforward calculation. The final rule includes such an approach as means of identifying limited derivatives users as discussed in section II.E below.

In addition and as proposed, we are not adopting a general asset segregation requirement to complement the rule's VaR-based limit on fund leverage risk.³⁰⁵ The Commission and staff

³⁰³ See CFA Comment Letter; see also 2015 Proposing Release, *supra* footnote 1.

³⁰⁴ See, e.g., ICI Comment Letter; Invesco Comment Letter; T. Rowe Price Comment Letter; Capital Group Comment Letter; AQR Comment Letter I.

³⁰⁵ See *infra* sections II.H, II.I (discussing specific asset segregation comments received relating to reverse repurchase agreements and unfunded commitment agreements).

have historically taken the position that a fund may appropriately manage risks that section 18 is designed to address if the fund “covers” its obligations in connection with various transactions by maintaining “segregated accounts.”³⁰⁶ Two commenters suggested that we add an asset segregation requirement to the final rule as a means of providing: (1) an additional limit on fund leverage risk with respect to a fund’s use of derivatives transactions; and (2) a specific requirement that funds have adequate assets to cover derivatives-related obligations.³⁰⁷ Many commenters, however, did not support an additional asset segregation requirement, and several of these commenters stated that an asset segregation regime may not be an effective means of addressing undue speculation concerns.³⁰⁸ For example, one commenter stated that, under the current asset segregation approach, a fund may obtain “a significant degree of leverage.”³⁰⁹ Another commenter stated that disparate asset segregation practices may create potential adverse results and would not require funds to “holistically assess and manage the several risks associated with derivatives transactions, including market and counterparty risks.”³¹⁰ One commenter stated that rather than an asset segregation requirement, a formalized risk management program is “foundational to any effective regulation” and “the key to curbing excessive borrowing and undue speculation.”³¹¹

After considering comments, we continue to believe that a general asset segregation requirement is not necessary in light of the final rule’s requirements, including the requirements

³⁰⁶ See *supra* section I.B.2; see also Proposing Release, *supra* footnote 1, at section II.F. The Commission included an asset segregation requirement in the 2015 proposal. See 2015 Proposing Release, *supra* footnote 1, at section III.C.

³⁰⁷ See Better Markets Comment Letter; CFA Comment Letter.

³⁰⁸ See, e.g., AQR Comment Letter I; J.P. Morgan Comment Letter; Invesco Comment Letter; PIMCO Comment Letter.

³⁰⁹ See J.P. Morgan Comment Letter.

³¹⁰ See Invesco Comment Letter; see also PIMCO Comment Letter. The Commission similarly observed in the Proposing Release that funds’ disparate practices under the current approach could create an un-level competitive landscape and make it difficult for funds and Commission staff to evaluate funds’ compliance with section 18. See Proposing Release, *supra* footnote 1, at section I.B.3. We continue to make these observations in this release. See *supra* footnote 7 and accompanying text.

³¹¹ See AQR Comment Letter I.

that funds must establish derivatives risk management programs and comply with the VaR-based limit on fund leverage risk. A fund relying on rule 18f-4 will be required to adopt and implement a written derivatives risk management program that, among other things, will require the fund to: identify and assess its derivatives risks; put in place guidelines to manage these risks; stress test the fund's portfolio at least weekly; and escalate material risks to the fund's portfolio managers and, as appropriate, the board of directors.³¹² These requirements are designed to require a fund to manage all of the risks associated with its derivatives transactions, including the risk that a fund may be required to sell its investments to generate cash to pay derivatives counterparties. Moreover, a fund's stress testing must specifically take into account the fund's payments to derivatives counterparties, and the rule's VaR-based limit on leverage risk is designed to limit a fund's leverage risk and therefore the potential for payments to derivatives counterparties.

2. Relative VaR Test

The relative VaR test will require a fund to calculate the VaR of the fund's portfolio and compare it to the VaR of a "designated reference portfolio."³¹³ We are adopting the relative VaR test as proposed with certain modifications discussed below, including the modification to permit a fund to use as its reference portfolio for the VaR test either an index that meets certain requirements (a "designated index") or the fund's own investments, excluding derivatives transactions (the fund's "securities portfolio").³¹⁴ A fund's designated reference portfolio is designed to create a baseline VaR that functions as the VaR of a fund's unleveraged portfolio. To the extent a fund entered into derivatives to leverage its portfolio, the relative VaR test is designed to identify this leveraging effect. If a fund is using derivatives and its VaR exceeds that of the designated reference portfolio, this difference may be attributable to leverage risk.

³¹² Rule 18f-4(c)(1). Funds that rely on the limited derivatives user exception similarly would be required to manage the risks associated with their more limited use of derivatives. *See infra* section II.E.

³¹³ *See* rule 18f-4(a) (defining the term "relative VaR test").

³¹⁴ *See* rule 18f-4(a) (defining the term "relative VaR test," "designated reference portfolio," and "securities portfolio").

a. Relative VaR as the Default VaR Test

The final rule, consistent with the proposal, uses the relative VaR test as the default test. Specifically, the final rule requires a fund to comply with the relative VaR test unless the fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, taking into account the fund's investments, investment objectives, and strategy.³¹⁵ A fund that does not apply the relative VaR test must comply with the absolute VaR test.³¹⁶

Some commenters recommended that the final rule not provide a relative VaR test as the default means of limiting fund leverage risk and instead permit a fund to choose to comply with either the relative VaR test or the absolute VaR test.³¹⁷ Some of these commenters were concerned that a relative VaR test default would create ambiguity about the circumstances under which a fund appropriately could use the absolute VaR test.³¹⁸ For example, some commenters stated that the proposal is unclear on what it means for a derivatives risk manager to be “unable to identify” an appropriate designated index, which could create compliance challenges or differing regulatory determinations for different funds.³¹⁹ Some commenters similarly were concerned that this aspect of the proposed rule would raise questions for derivatives risk managers about their process of searching for potential indexes (*e.g.*, the extent to which the derivatives risk manager would need to search for potentially appropriate indexes before determining that the fund would rely on the absolute VaR test).³²⁰ Some commenters stated that

³¹⁵ See rule 18f-4(c)(2).

³¹⁶ See *id.*

³¹⁷ See, *e.g.*, AQR Comment Letter I; MFA Comment Letter; BlackRock Comment Letter; Vanguard Comment Letter.

³¹⁸ See, *e.g.*, AQR Comment Letter I; NYC Bar Comment Letter; PIMCO Comment Letter.

³¹⁹ See, *e.g.*, Putnam Comment Letter; PIMCO Comment Letter; Dechert Comment Letter I.

As discussed in section II.D.2.b.i below, we are renaming the proposed term “designated reference index” as “designated index” in the final rule. For consistency with the final rule, we discuss comments received about the designated reference index as comments about the designated index.

³²⁰ See Dechert Comment Letter I; ICI Comment Letter; NYC Bar Comment Letter.

either the relative or the absolute VaR tests would protect investors.³²¹ Other commenters did not object to the proposed rule's relative VaR test default but urged that the Commission provide additional clarity regarding the kinds of funds that appropriately would rely on the absolute VaR test under the rule.³²² For example, commenters identified various fund strategies for which they believed the absolute VaR test should be appropriate under the final rule, including market-neutral funds, multi-alternative funds/non-correlated strategy funds, long-short funds, managed futures funds, and funds that invest in unique asset classes that may not have a broad-based index.³²³

After considering comments, we are adopting a relative VaR test as the default means of limiting fund leverage risk because we believe it resembles the way that section 18 limits a fund's leverage risk. Some commenters disagreed with this assertion in the Proposing Release because, for example, VaR measures risk—including non-leverage-related variables—while section 18 limits the amount of a fund's borrowings.³²⁴ We recognize that a relative VaR test differs from the asset coverage requirements in section 18. Section 18, however, limits the extent to which a fund can potentially increase its market exposure through leveraging by issuing senior securities, but it does not directly limit a fund's level of risk or volatility. For example, a fund that invests in less-volatile securities and borrows the maximum amount permitted by section 18 and uses the borrowings to leverage the fund's portfolio may not be as volatile as a completely unleveraged fund that invests in more-volatile securities. In other words, section 18, like the relative VaR test, limits a fund's potential leverage on a relative rather than absolute basis. We designed the relative VaR test likewise to limit the extent to which a fund increases its market risk by leveraging its portfolio through derivatives, while not restricting a fund's ability to use derivatives for other purposes. For example, if a derivatives transaction reduces (or does not

³²¹ See Dechert Comment Letter I; PIMCO Comment Letter.

³²² See, e.g., ICI Comment Letter; J.P. Morgan Comment Letter.

³²³ See, e.g., ICI Comment Letter; J.P. Morgan Comment Letter; Invesco Comment Letter.

³²⁴ See, e.g., Dechert Comment Letter I; PIMCO Comment Letter; MFA Comment Letter.

substantially increase) a fund's VaR relative to the VaR of the designated reference portfolio, the transaction would not be restricted by the relative VaR test.

We believe that allowing a fund to use the absolute VaR test may be inconsistent with investors' expectations where there is an appropriate reference portfolio for purposes of the relative VaR test. For example, a fund that invests in short-term fixed-income securities would have a relatively low level of volatility. The fund's investors could reasonably expect that the fund might exhibit a degree of volatility that is broadly consistent with the volatility of the markets or asset classes in which the fund invests, as represented by the fund's designated reference portfolio. This fund's designated reference portfolio would be composed of short-term fixed income securities, and could, for example, have a VaR of 4%. If the fund were permitted to rely on the absolute VaR test, however, the fund could substantially leverage its portfolio five times its designated reference portfolio's VaR to achieve a level of volatility that substantially exceeds the volatility associated with short-term fixed income securities. Although commenters urged that a fund could address investor expectation concerns regarding a fund's leverage risk through disclosure,³²⁵ section 18 limits a fund's ability to obtain leverage through the issuance of senior securities and operates independently of a fund's disclosure. Investors therefore may reasonably expect that a fund will not be highly leveraged. The fixed-income fund in this example, in contrast, would be highly leveraged and the fund's disclosing that risk would not address the leverage risks that section 18 addresses or that the VaR test is designed to limit.

We recognize, however, that the proposed rule's reference to a derivatives risk manager being unable "to identify" a designated index that is appropriate for the fund raised questions about the diligence a derivatives risk manager was expected to undertake in considering potential indexes.³²⁶ As noted above, the final rule requires a fund to comply with the relative VaR test unless the fund's derivatives risk manager reasonably determines that a designated reference

³²⁵ See, e.g., Dechert Comment Letter I; PIMCO Comment Letter.

³²⁶ See, e.g., Dechert Comment Letter I; ICI Comment Letter; SIFMA AMG Comment Letter; T. Rowe Price Comment Letter.

portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, taking into account the fund's investments, investment objectives, and strategy. This modification from the proposal is designed to make clear that this provision involves a derivatives risk manager's determination after reasonable inquiry and analysis regarding the feasibility of applying a relative VaR test to a fund and the appropriate reference portfolio for that purpose. We believe the final rule provides greater clarity on this point than the proposed rule's reference to an index that is "appropriate" for the fund.

We believe that the modification also should address the concern expressed by a commenter that the proposed provision could have created confusion concerning "whether a derivatives risk manager must in all cases undertake an analysis of how a designated index might work for a fund even where that derivatives risk manager clearly knows that absolute VaR is the most appropriate test."³²⁷ For example, some funds may make frequent changes to how they allocate their assets across a varying set of markets and asset classes, where a different, appropriate unleveraged index might be available for each allocation but the appropriate unleveraged index would change frequently. Switching the fund's designated index frequently could be impractical and support a determination that a designated index would not provide an appropriate reference portfolio for purposes of the relative VaR test. Whether the fund's securities portfolio would provide an appropriate reference portfolio would depend on the facts and circumstances and could change from time to time. For example, a fund obtaining its investment exposure through both cash-market investments and derivatives transactions may find that, by excluding its derivative transactions, the fund's securities portfolio does not reflect the overall markets or asset classes in which the fund invests both directly and indirectly through derivatives transactions. The fund is subject to the absolute VaR test if the fund's derivatives risk manager reasonably determines that neither a designated index nor the fund's securities portfolio would provide an appropriate reference portfolio for purposes of the relative VaR test, taking into account the fund's investments, investment objectives, and strategy.

³²⁷ See AQR Comment Letter I.

As another example, the derivatives risk manager for a long/short or market neutral fund may determine that, although an index is available that reflects the markets or asset classes in which the fund invests, the funds' strategies do not involve the kind of risk that is associated with the market risk of the index, and the index therefore does not provide an appropriate reference portfolio for purposes of the relative VaR test. As in the prior example, the fund's securities portfolio may not reflect the overall markets or asset classes in which the fund invests or involve the kind of market risk associated with the fund's strategy. The fund, for example, may obtain its long exposure through cash-market investments in securities and its short exposure through derivatives transactions.³²⁸ A final example, which the Commission discussed in the proposal, is that some multi-strategy funds manage their portfolios based on target volatilities but implement a variety of investment strategies, making it difficult to identify a single index (even a blended index) that would be appropriate.³²⁹ The fund's securities portfolio also may not reflect the markets or asset classes in which the fund invests if, for example, the fund pursues certain strategies through investments in derivatives transactions and others through cash-market investments in securities. As some commenters noted, a variety of factors may bear on whether a designated reference portfolio would be appropriate for purposes of the relative VaR test, including a fund's investment strategy.³³⁰

b. Designated Reference Portfolio

The final rule's relative VaR test compares the fund's VaR to the VaR of a designated reference portfolio. Under the rule, a designated reference portfolio is either a designated index or the fund's securities portfolio, which we discuss in turn below.

³²⁸ The fund in this example also could obtain both its long and short exposure through derivatives transactions, with its securities portfolio consisting primarily of cash and cash equivalents. As we observed in the Proposing Release, this would not provide an appropriate comparison for a relative VaR test because the VaR of the cash and cash equivalents would be very low and would not provide a reference level of risk associated with the fund's strategy.

³²⁹ See Proposing Release, *supra* footnote 1, at section II.D.3.

³³⁰ See, e.g., J.P. Morgan Comment Letter (including factors such as "fund composition by security selection, asset class, region, duration or market capitalization, consistency of investment approach over time, internal or disclosed constraints, and ability to materially deviate from its primary investment strategy"); Putnam Comment Letter (including factors such as "differences in constituents and risk profiles" between the fund's portfolio and benchmark indexes).

i. Designated Index

We are adopting the definition of a “designated index” with certain modifications from the proposed definition of a “designated reference index” discussed below. We are renaming the proposed definition to “designated index” to differentiate it more clearly from the final rule’s definition of a “designated reference portfolio.” The final rule will define a “designated index” as an unleveraged index that is approved by the derivatives risk manager for purposes of the relative VaR test, and that reflects the markets or asset classes in which the fund invests.³³¹ The definition also will require that the designated index not be an index that is administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used (a “prohibited index”).³³² In a change from the proposal, the designated index is not required to be an “appropriate broad-based securities market index” or an “additional index” as defined in Item 27 of Form N-1A or Item 24 of Form N-2.³³³ We are making this change in light of the fact that the final rule will not require a fund to disclose its designated index in the annual report, together with a presentation of the fund’s performance relative to the designated index.³³⁴ We discuss each of the elements of the final definition of the term “designated index” below.

³³¹ See rule 18f-4(a) (defining the term “designated index”). Under the final rule, a designated index is an index “approved,” rather than “selected,” by the derivatives risk manager as proposed. As one commenter observed in recommending this modification, advisory personnel may recommend an index to the derivatives risk manager based on their market expertise and knowledge of the fund’s investment strategy and seek the derivatives risk manager’s approval. See J.P. Morgan Comment Letter.

³³² Furthermore, for a blended index, none of the indexes that compose the blended index may be administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used. See rule 18f-4(a).

³³³ See rule 18f-4(a); proposed rule 18f-4(a); see also Instructions 5 and 6 to Item 27(b)(7)(ii) of Form N-1A (discussing the terms “appropriate broad-based securities market index” and “additional index”); Instruction 4 to Item 24 of Form N-2 (discussing the terms “appropriate broad-based securities market index” and “additional index”).

³³⁴ See rule 18f-4(c)(2)(iv).

An Unleveraged Index

As proposed, a fund's designated index must be unleveraged. This requirement is designed to provide an appropriate baseline against which to measure a fund's portfolio VaR for purposes of assessing the fund's leverage risk. Conducting a VaR test using a designated index that itself is leveraged would distort the leverage-limiting purpose of the VaR comparison by inflating the volatility of the index that serves as the reference portfolio for the relative VaR test. For example, an equity fund might select as its designated index an index that tracks a basket of large-cap U.S. listed equity securities such as the S&P 500. But the fund could not select an index that is leveraged, such as an index that tracks 200% of the performance of the S&P 500.

A few commenters requested clarification regarding when an index would be "leveraged."³³⁵ These commenters urged that an index should be considered leveraged if it seeks to provide a multiple of returns, but not solely because it includes derivatives instruments. Commenters identified certain commodity indexes and currency-hedged equity indexes as examples of indexes that commenters believed were unleveraged, notwithstanding that the indexes included derivatives instruments.³³⁶ We agree that whether a particular index is "leveraged" would depend on the economic characteristics of the index's constituents, and not just on whether some or all of the constituents are derivatives. An index would be leveraged if, for example, the derivatives included in the index multiply the returns of the index or index constituents, as suggested by these commenters.

Reflects the Markets or Asset Classes in Which the Fund Invests

As the Commission discussed in the proposal, the requirement that the designated index reflect the markets or asset classes in which the fund invests is designed to provide an appropriate baseline for the relative VaR test.³³⁷ A few commenters raised concerns about scenarios in which a fund may invest in markets and asset classes that are reflected in an index,

³³⁵ See, e.g., BlackRock Comment Letter; Invesco Comment Letter; PIMCO Comment Letter.

³³⁶ See *id.*

³³⁷ See Proposing Release, *supra* footnote 1, at section II.D.2.

but the index would not provide an appropriate point of comparison for a relative VaR test because it did not reflect the fund's investment strategy.³³⁸ These commenters therefore suggested that the Commission revise the definition to reference the fund's investment strategy, either in lieu of or in addition to the markets or asset classes in which the fund invests.

We have not made this suggested modification because we believe that the concerns raised by commenters are addressed by the modifications discussed above concerning the derivatives risk manager's reasonable determination that a designated index would not provide an appropriate reference portfolio for purposes of the relative VaR test, which includes taking into account the fund's investment strategy. As discussed above in the context of an example involving a long/short or market neutral fund, a fund's derivatives risk manager may determine that, although an index is available that reflects the markets or asset classes in which the fund invests, the funds' strategies do not involve the kind of risk that is associated with the market risk of the index, and the index therefore does not provide an appropriate reference portfolio for purposes of the relative VaR test. We believe this modification clarifies that a fund's investment strategy is relevant even if an index reflects the markets or asset classes in which the fund invests.

Prohibited Indexes

We are adopting, as proposed, the requirement that a fund's designated index is not a prohibited index. Accordingly, unless it is widely recognized and used, the designated index must not be an index administered by an organization that is an affiliated person of the fund, its investment adviser, or its principal underwriter, or created at the request of the fund or its investment adviser.³³⁹ This provision is designed to prevent an actively managed fund from using an index for the purpose of obtaining additional fund leverage risk. In a change from the

³³⁸ See Franklin Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter.

³³⁹ See rule 18f-4(a); see also proposed rule 18f-4(a). This "widely recognized and used" standard has historically been used to permit a fund to employ affiliated-administered indexes for disclosure purposes, when the use of such indexes otherwise would not be permitted. See Instructions 5 and 6 to Item 27(b)(7)(ii) of Form N-1A and Instruction 4 to Item 24 of Form N-2 (discussing the terms "appropriate broad-based securities market index" and "additional index").

proposal discussed further below, notwithstanding this requirement, a fund with the investment objective to track the performance (including a leveraged multiple or inverse multiple) of an unleveraged index must use the unleveraged index it is tracking as its designated reference portfolio.³⁴⁰

A few commenters suggested that we allow funds to use indexes that would be prohibited by the proposed provision.³⁴¹ One commenter suggested that the rule permit an unaffiliated index created at the request of the fund or its investment adviser to be a designated index on the basis that the index provider, in its sole discretion, determines the composition of the index, the rebalance protocols of the index, the weightings of the securities and other instruments in the index, and any updates to the methodology.³⁴² Similarly, another commenter stated that the proposed prohibited indexes need not present a conflict in the management of the index, as index providers develop and maintain the index methodology independently as their own intellectual property.³⁴³ This commenter suggested the final rule could require the proposed prohibited indexes to comply with principles developed by the International Organization of Securities Commissions and that an index administrator could disclose its policies and procedures with respect to index design and disclose any material conflicts of interest. Another commenter raised concerns that if prohibited indexes are excluded under the rule, a fund may be forced to use a more “broad-based” index that does not closely mirror the fund’s investment program.³⁴⁴ This in turn could result in the relative VaR test failing to properly measure the contribution of derivatives to that fund’s overall investment exposure, making the VaR test inappropriately restrictive or permissive.³⁴⁵ On the other hand, one commenter stated that prohibited indexes do

³⁴⁰ In this release we refer to funds that do not have the investment objective to track the performance (including a leveraged multiple or inverse multiple) of an unleveraged index as “actively managed.”

³⁴¹ See, e.g., BlackRock Comment Letter; Morningstar Comment Letter; Nuveen Comment Letter.

³⁴² See BlackRock Comment Letter.

³⁴³ See Morningstar Comment Letter.

³⁴⁴ See Nuveen Comment Letter.

³⁴⁵ *Id.*

not solve this concern because of the administrative and cost burdens associated with bespoke indexes, including index creation, maintenance, and oversight.³⁴⁶

The final rule provides flexibility for actively managed funds in identifying designated indexes. As proposed, it permits a fund to use a blended index as its designated index, provided that each constituent index meets the rule's requirements.³⁴⁷ This provision is designed to provide a fund flexibility to blend indexes to create a designated index that is more closely tailored to the fund's investment program. Solely for the purpose of complying with the relative VaR test, we would not view a designated index blended by the fund's investment adviser as a prohibited index if each of the constituent indexes meets the rule's requirements for a designated index.³⁴⁸ The final rule also seeks to address potential differences in the composition of a designated index and a fund's portfolio by raising the level of the relative VaR test, as discussed in more detail below. The final rule, with these modifications, is designed to provide funds flexibility in selecting a designated index, while making it less likely that indexes permissible under the final rule will be designed with the intent of permitting a fund to incur additional leverage-related risk.

For all of these reasons, we are not modifying the proposed rule to permit funds to use the prohibited indexes suggested by some commenters. Although commenters suggested additional restrictions discussed above to attempt to address concerns regarding the potential for funds to obtain additional fund leverage risk inconsistent with the rule, we believe that the final rule

³⁴⁶ See Comment Letter of Dechert LLP (July 6, 2020) ("Dechert Comment Letter III").

³⁴⁷ See rule 18f-4(a); proposed rule 18f-4(a). Under the rule, the composition of a blended index is limited to indexes and the rule does not permit a fund to blend one or more indexes and its securities portfolio.

³⁴⁸ A few commenters sought clarification regarding indexes blended by a fund's adviser. *See, e.g.*, BlackRock Comment Letter; Fidelity Comment Letter; PIMCO Comment Letter. One commenter also sought guidance regarding the circumstances under which a fund could determine to change the composition of a blended index. *See* PIMCO Comment Letter. The final rule does not limit a fund's ability to change its designated index, including a blended index. Any designated index used by a fund, however, is subject to the requirements in the final rule and related reporting requirements. For example, the derivatives risk manager as part of its periodic review of the program will evaluate the appropriateness of the designated index, and if the derivatives risk manager approves a different designated index, it must report the basis for the change and approval of the new designated index in its written report to the board.

provides sufficient flexibility for funds to identify appropriate designated indexes without introducing the “gaming” and oversight concerns associated with prohibited indexes.³⁴⁹

In a change from the proposal, the final rule provides that, if the fund’s investment objective is to track the performance (including a leverage multiple or inverse multiple) of an unleveraged index, the fund must use that index as its designated reference portfolio, even if the index otherwise would be a prohibited index that would not be permitted under the rule.³⁵⁰ Although the limitations on prohibited indexes generally are designed to address concerns about indexes created for the purpose of permitting a fund to incur additional leverage-related risks, these “gaming” concerns are not present where the fund’s investment objective is to track an unleveraged index. We also agree with the commenters who observed that, where a fund tracks an index, that index will provide the most appropriate reference portfolio for a relative VaR test, regardless of whether the index would otherwise be an impermissible prohibited index under the rule.³⁵¹

Proposed Index Disclosure Requirement in the Fund’s Annual Report

In a change from the proposal, the final rule will not require that a fund publicly disclose the designated index in the fund’s annual report.³⁵² The proposed rule would have required an open-end fund and a registered closed-end fund to disclose the fund’s designated index in the fund’s annual report as the fund’s “appropriate broad-based securities market index” or an

³⁴⁹ One of the commenters suggesting additional restrictions raised the concern that not allowing funds to use a prohibited index unless it is widely recognized and used “could entrench incumbents, further concentrating monopoly power in the index business, and prevent funds from finding an appropriate derivatives reference index.” Morningstar Comment Letter. This requirement is not intended to favor incumbents and the “widely recognized” qualifier is derived from current disclosure requirements. *See supra* footnote 339. The “widely recognized” qualifier does not apply to indexes generally under the final rule. That qualifier only applies if the index is administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, in light of the potential gaming concerns discussed above. In addition, as discussed below, an index-tracking fund will use its index as the fund’s designated index, even if that index otherwise would be a prohibited index.

³⁵⁰ *See* rule 18f-4(a) (defining the term “designated reference portfolio”); proposed rule 18f-4(a).

³⁵¹ *See, e.g.,* BlackRock Comment Letter; Dechert Comment Letter I; ICI Comment Letter.

³⁵² *See* rule 18f-4(a); proposed rule 18f-4(a); proposed rule 18f-4(c)(2)(iv).

“additional index” in the context of the fund’s performance disclosure.³⁵³ The proposed rule similarly would have required a BDC to disclose its designated index in its annual report filed on Form 10-K. The Commission proposed this requirement to promote the fund’s selection of an appropriate index that reflects the fund’s portfolio risks and its investor expectations.

After further consideration, we are not adopting this requirement. Disclosing the fund’s designated index in the fund’s annual report could make the annual report disclosure less effective in serving its primary purpose of showing the investor how his or her fund performed relative to the market. This would not be consistent with our goal of promoting concise fund disclosure to highlight key information to investors, as reflected in the Commission’s recent proposal to the disclosure framework for open-end funds.³⁵⁴ In addition, no commenter suggested that disclosing a fund’s designated index would be effective in promoting the selection of appropriate indexes.³⁵⁵ Moreover, to the extent scrutiny of a fund’s performance relative to its designated index would serve this purpose, a fund’s designated index will remain publicly available on Form N-PORT. Financial professionals, including research analysts, can still consider and compare a fund’s performance with the performance of its designated index and in that way provide a secondary “check” on funds’ designated indexes.

We also believe that the final rule includes appropriate incentives to promote the fund’s selection of an appropriate index that reflects the fund’s portfolio risks and its investors’

³⁵³ See proposed rule 18f-4(c)(2)(iv).

³⁵⁴ See Tailored Shareholder Reports, Treatment of Annual Prospectus Updates for Existing Investors, and Improved Fee and Risk Disclosure for Mutual Funds and Exchange-Traded Funds; Fee Information in Investment Company Advertisements, Investment Company Act Release No. 33963 (Aug. 5, 2020). We also are not requiring that a fund disclose in its annual report certain additional information related to a fund’s adherence to risk metrics, as one commenter suggested, because we similarly do not believe this information would be consistent with our goal of promoting concise fund disclosure to highlight key information to investors. See NASAA Comment Letter; *see also infra* section II.G.1.b.

³⁵⁵ One commenter supported the proposed disclosure requirement generally but did not state that it would be effective in promoting the selection of appropriate indexes. See NASAA Comment Letter. Several commenters stated that there should not be a presumption that a fund’s performance benchmark will be its designated index. See, e.g., AQR Comment Letter I; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter. We agree, and we believe that the decision not to require a fund to include its designated index in the context of its performance disclosure helps to clarify this. However, as discussed above, an index-tracking fund that tracks an unleveraged index must use that index as its designated reference portfolio.

expectations. First, the rule requires the derivatives risk manager to approve the designated index and to review it periodically. Second, the board of directors will receive a written report providing the derivatives risk manager's basis for approving the fund's designated index or a change to that index. Third, the fund will disclose its designated index to the Commission on Form N-PORT, which will be publicly available for the third month of each fund's quarter.

ii. Securities Portfolio

In a change from the proposal, an actively managed fund can use its securities portfolio as the reference portfolio for the relative VaR test. A fund's securities portfolio, as defined in the final rule, is the fund's portfolio of securities and other investments, excluding any derivatives transactions, subject to certain additional requirements discussed below. This provision is limited to actively managed funds because, as discussed above, an index-tracking fund must use the index it tracks as its designated reference portfolio.

In the Proposing Release the Commission requested comment on whether to permit funds to compare their VaRs to their "securities VaR," that is, the VaR of the fund's portfolio of securities and other investments, but excluding any derivatives transactions.³⁵⁶ This is similar to an approach the Commission proposed in 2015.³⁵⁷ In not proposing this approach in 2019, the Commission stated that it would not be appropriate for all funds, identifying in particular funds that invest extensively in derivatives and hold primarily cash and cash equivalents and derivatives.

One commenter urged the Commission to adopt this approach as an option that funds could use instead of a relative VaR test that requires a comparison using a designated index.³⁵⁸ The commenter recommended that a fund compute the VaR of its actual portfolio of securities and other investments, but excluding any derivatives transactions, consistent with the Commission's request for comment. The commenter stated that this approach would help to

³⁵⁶ See Proposing Release, *supra* footnote 1, at n.205 and accompanying discussion.

³⁵⁷ See 2015 Proposing Release, *supra* footnote 1.

³⁵⁸ See Invesco Comment Letter.

address instances where the fund's portfolio differed from its designated index, with the fund's own investments serving as a better representation of the fund's unleveraged portfolio for purposes of the relative VaR test. Similar to provisions applicable to the designated index approach, the commenter recommended a fund's use of its securities portfolio be subject to formalized procedures. For example, the commenter suggested that a fund's use of a securities portfolio (or designated index) would be addressed in the fund's derivatives risk management program, which requires the derivatives risk manager to periodically review—and report to the board regarding—a fund's designated reference portfolio. Other commenters, although not recommending this approach specifically, identified challenges funds could face where the fund's VaR deviates from the VaR of the fund's benchmark index due to security selection rather than leveraging.³⁵⁹

After considering these comments, we have determined to permit actively managed funds to use their “securities portfolio” for purposes of the relative VaR test. A fund's securities portfolio will be the fund's portfolio of securities and other investments, excluding any derivatives transactions. Excluding the fund's derivatives transactions is designed to provide an unleveraged reference portfolio, akin to a designated index, to measure potential leverage risk introduced by the fund's derivatives transactions. The final rule also provides that the securities portfolio is approved by the derivatives risk manager for purposes of the relative VaR test and reflects the markets or asset classes in which the fund invests (*i.e.*, the markets or asset classes in which the fund invests directly through securities and other investments and indirectly through derivatives transactions). The requirement that the fund's securities portfolio reflects the markets or asset classes in which the fund invests is designed to provide an appropriate baseline for the relative VaR test, consistent with the same requirement applicable to designated indexes.³⁶⁰ Absent this requirement, a fund could, for example, invest in a small number of highly-volatile securities that are not representative of the fund's overall investments for the purpose of

³⁵⁹ We discuss these comments in more detail in section II.D.2.c.i.

³⁶⁰ See *supra* footnote 337 and accompanying text.

obtaining a higher amount of leverage risk. Finally, the final rule includes provisions designed to promote a fund's appropriate use of the securities portfolio approach that are analogous to the requirements for funds' use of designated indexes. These requirements include periodic review by the fund's derivatives risk manager and board reporting.³⁶¹

These requirements, taken together, are designed to produce a reference portfolio that, like a designated index, creates a baseline VaR that functions as the VaR of a fund's unleveraged portfolio for purposes of the relative VaR test. Allowing a fund to use its securities portfolio may allow funds to use a VaR reference portfolio that is more tailored to the fund's investments than an index, or allow the fund to avoid the expense associated with blending or licensing an index just for purposes of the final rule's relative VaR test.

The final rule does not require that a fund "scale down" the VaR of its securities portfolio if the fund also has issued senior security debt not represented by the fund's derivatives transactions, as a commenter recommended.³⁶² We do not believe this specific adjustment is necessary in order for a fund's securities portfolio to represent an unleveraged reference portfolio. This is because the final rule provides that VaR must be expressed as a percentage of the value of the relevant portfolio—the scale of the fund's securities portfolio, even if increased by borrowings, would not change the portfolio's VaR when expressed as a percentage.³⁶³ The final rule includes a clarifying edit to make clear that a fund's VaR is measured as a percentage of the value of the fund's net assets, whereas the VaR of a fund's securities portfolio (or designated index) is measured as a percentage of the value of the portfolio.³⁶⁴

³⁶¹ See rule 18f-4(c)(1)(vi) (requiring periodic review); rule 18f-4(c)(3)(ii) (requiring a written report to the board providing the basis for the derivatives risk manager's approval); item B.10.b.i on Form N-PORT (requiring a fund to report on Form N-PORT that it is using its securities portfolio for purposes of the relative VaR test).

³⁶² See Invesco Comment Letter.

³⁶³ Take, for example, a fund with \$100 to invest that borrows \$50 and invests its then-\$150 in total assets in a portfolio that replicates the S&P 500. If the S&P's VaR is 10%, the fund's securities portfolio would likewise have a VaR of 10%, regardless of the size of the portfolio as a result of borrowing, just as if the fund had used the S&P 500 as its designated index. The fund's own VaR would be 150% of the S&P 500 VaR because the fund's estimated losses would be measured relative to the fund's \$100 net asset value, rather than the fund's total assets of \$150.

³⁶⁴ See rule 18f-4 (a) (defining the term "value-at-risk or VaR").

c. 200% and 250% Limits Under Relative VaR Test

Under the final rule a fund's VaR must not exceed 200% of the VaR of the fund's designated reference portfolio, unless the fund is a closed-end company that has then-outstanding shares of a preferred stock issued to investors.³⁶⁵ For such closed-end funds, the VaR must not exceed 250% of the VaR of the fund's designated reference portfolio. This requirement is modified from the proposal, which would have limited a fund's VaR, including a closed-end fund's VaR, to 150% of the VaR of the fund's designated index.³⁶⁶

i. 200% Limit

In proposing a 150% relative VaR limit, the Commission first considered the extent to which a fund could borrow in compliance with the requirements of section 18.³⁶⁷ For example, a mutual fund with \$100 in assets and no liabilities or senior securities outstanding could borrow an additional \$50 from a bank. With the additional \$50 in bank borrowings, the mutual fund could invest \$150 in securities based on \$100 of net assets. This fund's VaR would be approximately 150% of the VaR of the fund's designated index if the fund used the borrowings to leverage its portfolio by investing in securities consistent with the fund's strategy. The proposed 150% relative VaR limit was designed to limit a fund's leverage risk related to derivatives transactions in a way that is effectively similar to the way that section 18 limits a registered open- or closed-end fund's ability to borrow from a bank (or issue other senior securities representing indebtedness for registered closed-end funds) subject to the 300% asset coverage requirement in section 18. The proposed limit also was designed to recognize that, while a fund could achieve certain levels of market exposure through borrowings permitted under section 18, it may be more efficient to obtain those exposures through derivatives transactions. In the proposal, the Commission requested comment on the appropriate relative

³⁶⁵ See rule 18f-4(a) (defining the term "relative VaR test"). A "closed-end company" means any management company other than an open-end company, and thus includes both registered closed-end funds and BDCs.

³⁶⁶ See proposed rule 18f-4(a).

³⁶⁷ See Proposing Release, *supra* footnote 1, at section II.D.2.b.

VaR test limit, including specifically requesting comment on a 200% relative VaR test limit, and discussed the 200% relative VaR limit applicable to UCITS funds.

Many commenters urged the Commission to raise the relative VaR limit from 150% to 200% of a fund's designated index.³⁶⁸ These commenters stated that this modification would be appropriate to address factors other than a fund's use of derivatives that could cause a fund's VaR to exceed the VaR of a designated index.³⁶⁹ For example, some commenters stated that a fund's security selection will influence a fund's relative VaR calculation.³⁷⁰ Commenters stated that the proposed VaR test could be particularly restrictive for actively-managed fixed-income funds.³⁷¹ These commenters stated that an actively-managed fixed-income fund will have an expected amount of tracking error against a low-volatility benchmark based on the fund's security selection and concentration levels. Differences between a fund's portfolio and its reference portfolio—rather than leveraging with derivatives—could cause a fund's VaR to exceed the VaR of its designated reference portfolio.

Several commenters suggested that setting the relative VaR limit to 150% as an analogy to the 300% asset coverage requirement for bank borrowings under section 18 is inappropriate because the restriction on bank borrowings isolates leverage related to bank borrowings, whereas a VaR test measures risk from non-derivative instruments and is affected by variables other than leverage risk introduced by a fund's use of derivatives.³⁷² Some of these commenters provided examples of funds that do not use derivatives but have VaRs exceeding the VaR of their respective indexes, including, as examples, funds with portfolio VaRs equal to 120% or more of

³⁶⁸ See, e.g., Capital Group Comment Letter; ISDA Comment Letter; Dechert Comment Letter I; ICI Comment Letter; ABA Comment Letter; BlackRock Comment Letter; Chamber Comment Letter; Franklin Comment Letter; J.P. Morgan Comment Letter; Eaton Vance Comment Letter; PIMCO Comment Letter; Putnam Comment Letter; T. Rowe Price Comment Letter; Vanguard Comment Letter.

³⁶⁹ See, e.g., Capital Group Comment Letter; Franklin Comment Letter; J.P. Morgan Comment Letter.

³⁷⁰ See, e.g., Dechert Comment Letter I; T. Rowe Price Comment Letter; MFA Comment Letter; SIFMA AMG Comment Letter.

³⁷¹ See AQR Comment Letter I; SIFMA AMG Comment Letter; Invesco Comment Letter; Dechert Comment Letter III.

³⁷² See, e.g., Dechert Comment Letter I; ICI Comment Letter.

their index VaR.³⁷³ While supporting the use of VaR as a means of limiting fund leverage risk, these commenters urged that an incrementally higher VaR limit would be needed to account for the inherent imprecision in using VaR to identify potential leverage relative to a fund's index's VaR.

Commenters also stated that firms would likely set internal VaR thresholds that are lower than the rule would prescribe because of the proposed board and SEC reporting requirements for VaR exceedances.³⁷⁴ As one commenter observed “fund managers for years managed portfolio risks against internal risk tolerance limits using VaR-based metrics, among other tools.”³⁷⁵ This is consistent with the design of rule 18f-4, which uses VaR as an outer limit on fund leverage risk for any fund using derivatives transactions that is unable to rely on the limited derivatives user exception. Because the final rule's VaR tests provide an outer limit on fund leverage risk for funds generally, and given the wide range of fund strategies, we expect that many funds will use derivatives transactions in such a manner that their fund's VaR generally is not at or approaching this limit. A fund's derivatives risk management program could incorporate internal VaR thresholds lower than the rule's VaR-based outer limit, as described by commenters, that in conjunction with the other program elements are tailored to appropriately manage a fund's particular derivatives risks.

Many commenters also observed that raising the relative VaR limit to 200% would match the 200% relative VaR limit in the UCITS framework and provide compliance and operational efficiencies.³⁷⁶ Some commenters stated that more closely aligning with the UCITS framework would permit global fund complexes to streamline their risk management programs and VaR testing across jurisdictions because these firms could rely on existing risk management tools and

³⁷³ See Nuveen Comment Letter; SIFMA AMG Comment Letter.

³⁷⁴ See T. Rowe Price Comment Letter; Dechert Comment Letter I; J.P. Morgan Comment Letter; SIFMA AMG Comment Letter.

³⁷⁵ See Vanguard Comment Letter.

³⁷⁶ See NYC Bar Comment Letter; BlackRock Comment Letter; Dechert Comment Letter I.

VaR testing already in use to satisfy UCITS requirements.³⁷⁷ Two commenters stated that these efficiencies may benefit investors due to lower compliance costs.³⁷⁸ Two other commenters stated that raising the relative VaR limit to align with UCITS' VaR limits would create operational efficiencies because fund complexes that seek to create similar investment programs could use similar portfolio and risk management for U.S. funds and UCITS funds.³⁷⁹ Commenters also emphasized that the UCITS framework is an existing regime that they believe provides effective investor protections.³⁸⁰

After considering comments, we have determined to increase the relative VaR test's outer limit on fund leverage risk from 150% to 200% (with additional modifications for certain closed-end funds discussed below).³⁸¹ We believe that a relative VaR test that first considers the extent to which a fund could borrow in compliance with the requirements of section 18 is appropriate. We recognize, however, that VaR is not itself a leverage measure and factors other than derivatives and leverage can cause a fund's VaR to exceed the VaR of its designated reference portfolio, such as a fund's security selection.³⁸² Where a fund uses its securities portfolio, the fund's securities investments will reflect the markets or asset classes in which the fund invests. However, there still may be differences between the VaR of the fund's securities portfolio and the VaR of its total portfolio that relate to differences in risks associated with specific securities versus derivatives investments, rather than leverage risk. A fund, for example, might obtain investment exposure to a number of issuers—in some cases through direct investments in the issuer's securities and in other cases indirectly through derivatives transactions referencing the

³⁷⁷ See ABA Comment Letter; BlackRock Comment Letter; Eaton Vance Comment Letter.

³⁷⁸ See Capital Group Comment Letter; SIFMA Comment Letter.

³⁷⁹ See PIMCO Comment Letter; Franklin Comment Letter.

³⁸⁰ See, e.g., ABA Comment Letter; BlackRock Comment Letter; Eaton Vance Comment Letter.

³⁸¹ See rule 18f-4(a).

³⁸² Moreover, as discussed above, the final rule generally does not permit funds to use prohibited indexes as their designated indexes to address the potential for funds to construct indexes for the purpose of increasing potential fund leverage risk. This limitation may, however, increase the likelihood that security selection—rather than derivatives and leverage—may cause the fund's VaR to exceed the VaR of its designated index. This is because an unleveraged broad-based index may include a broader range of securities than those held by the fund.

issuer's securities. The derivatives transactions could result in the fund's VaR exceeding the VaR of the fund's securities portfolio, not necessarily because of any leveraging associated with the derivatives transactions, but because of the issuer-specific risk associated with the derivatives transactions' underlying reference assets. Adopting a 200% relative VaR limit decreases the likelihood that security selection and the additional risks VaR measures beyond leverage risk would cause a fund to come out of compliance with the relative VaR test. We also believe that raising the relative VaR test limit to 200% is consistent with the VaR tests providing an appropriate outer bound on fund leverage risk, complemented by a derivatives risk management program tailored to the fund.

The 200% relative VaR limit also may provide compliance and operational efficiencies. We recognize that many advisers to U.S. funds using derivatives transactions also advise, or may have affiliates that advise, UCITS funds that comply with UCITS requirements. Providing a degree of consistency between the final rule and UCITS requirements therefore may provide the compliance and operational efficiencies identified by commenters, including by facilitating advisers' ability to offer similar strategies in the United States and Europe. This may benefit investors by facilitating investor choice and reducing costs (to the extent these efficiencies result in cost savings that are passed on to investors).

Two commenters suggested that the Commission modify the relative VaR test such that a fund would satisfy the test if its VaR did not exceed the greater of: (1) 200% of the VaR of the designated index; or (2) 10% of the fund's net asset value.³⁸³ These commenters stated that this approach would acknowledge that the absolute level of risk-taking by some funds is low and would not represent undue speculation in the commenters' view, while providing an alternative means of providing these funds flexibility where their portfolio composition deviates from the composition of their designated indexes.

³⁸³ See AQR Comment Letter I; Dechert Comment Letter III (suggesting also an alternate version of this 10% formulation: the fund's portfolio does not exceed the lesser of 300% of the VaR of the designated index or 10% of the fund's net asset value).

We have not incorporated these suggestions into the final rule because we believe that modifications we have made to the final rule should help to address commenters' concerns about the relative VaR test. For example, we are increasing the relative VaR levels from the proposal and modifying the remediation provision, among other changes.³⁸⁴ In addition, we are permitting actively managed funds to use their securities portfolio, where appropriate, which will allow these funds to use their own non-derivatives investments as the reference portfolio for the relative VaR test. Also, the suggested absolute VaR level of 10% included in these suggestions may permit substantial leverage for funds that invest in less-volatile securities. For example, a low-volatility bond fund and its designated index could each have a VaR of 1.5%, where under a 10% absolute VaR provision, the fund could leverage its portfolio almost seven times its designated index's VaR to substantially exceed the volatility associated with the low-volatility securities in its portfolio. Although one of these commenters suggested that a 10% absolute VaR limit could be capped at 300% of the VaR of its designated index, for all the reasons discussed above, we believe the relative VaR test limit should be 200%.

ii. 250% Limit

The Commission considered proposing different relative VaR tests for different types of investment companies, tied to the asset coverage requirements applicable to registered open-end funds, registered closed-end funds, and BDCs.³⁸⁵ The Commission did not propose a higher VaR limit for registered closed-end funds because, although these funds are permitted to issue preferred stock and open-end funds are not, registered closed-end funds' senior securities representing indebtedness are subject to the same 300% asset coverage requirements applicable to open-end funds.

In response to the proposal's requests for comment, several commenters urged the Commission to provide closed-end funds with a higher relative VaR limit than open-end funds

³⁸⁴ See *supra* section II.D.2.c (discussing relative VaR test limits); *infra* sections II.D.3 (discussing absolute VaR test limits), II.D.6.b (discussing remediation provisions).

³⁸⁵ See Proposing Release, *supra* footnote 1, at text accompanying n.210.

under the rule.³⁸⁶ These commenters generally reasoned that a higher VaR limit is appropriate for closed-end funds in consideration of the equity-based structural leverage that closed-end funds—and not open-end funds—can obtain through the issuance of preferred stock permitted under section 18 of the Investment Company Act.

Some commenters raised the concern that a closed-end fund that has outstanding preferred stock, before entering into any derivatives transactions, would have a higher starting VaR attributable to the structural leverage obtained through the issuance of preferred stock.³⁸⁷ Using the example of a fund with \$100 in assets and no liabilities or senior securities outstanding, a registered closed-end fund could only borrow \$50 through senior securities representing indebtedness, the same amount an open-end fund could borrow from a bank, but would be permitted also to issue an additional \$50 in preferred stock. If the closed-end fund raised \$50 in preferred stock and invested it in securities, the fund's VaR could potentially equal the proposed 150% relative VaR limit before the fund entered into any derivatives transactions.

Commenters offered a number of methods to provide closed-end funds with a higher VaR limit.³⁸⁸ For example, commenters suggested that the rule could provide an increase for closed-end funds' relative VaR limit based on the amount of structural leverage that a closed-end fund obtained, either based on the disclosed amount of structural leverage or the liquidation preference of any issued and then-outstanding preferred stock.³⁸⁹ Other commenters suggested

³⁸⁶ See PIMCO Comment Letter; Calamos Comment Letter; NYC Bar Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter; Nuveen Comment Letter; Eaton Vance Comment Letter; Comment Letter of Kramer Levin Naftalis Frankel LLP (Mar. 24, 2020) ("Kramer Levin Comment Letter").

³⁸⁷ See ICI Comment Letter; SIFMA AMG Comment Letter; Invesco Comment Letter; Nuveen Comment Letter.

³⁸⁸ See Calamos Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter; NYC Bar Comment Letter; PIMCO Comment Letter; SIFMA AMG Comment Letter; Nuveen Comment Letter.

³⁸⁹ See, e.g., Dechert Comment Letter I; Invesco Comment Letter; PIMCO Comment Letter; Nuveen Comment Letter; Calamos Comment Letter; ICI Comment Letter; SIFMA AMG Comment Letter. Commenters suggested a few different ways to effectuate these suggestions, including a preferred stock multiplier that a closed-end fund could apply to the relative VaR limit or to the underlying designated index. See, e.g., ICI Comment Letter; Invesco Comment Letter; Nuveen Comment Letter.

that the rule could provide a relative VaR limit specific to closed-end funds that is higher than the relative VaR limit applicable to open-end funds, with most of these commenters suggesting that a provision specific to closed-end funds reflect the addition of 50% to the relative VaR limit applicable to open-end funds (*i.e.*, 250% of the VaR of its designated index for closed-end funds to reflect their ability to obtain equity-based leverage).³⁹⁰

After considering these comments, we are modifying the proposed rule's relative VaR test to include a clause providing a higher VaR limit of 250% of the VaR of a fund's designated reference portfolio for a closed-end fund with outstanding preferred stock. This modification is designed to address the concern, raised by commenters, that providing the same relative VaR limit for open-end funds and closed-end funds does not take into account that closed-end funds may have a higher VaR because of their issuance of preferred stock before entering into any derivatives transactions. Absent a modification in these circumstances, a closed-end fund could potentially have no or limited flexibility to enter into derivatives transactions under the rule. For example, if a closed-end fund with \$100 in assets and no liabilities or senior securities outstanding then raised \$100 in preferred stock and invested it in securities, the fund's VaR could potentially equal the 200% relative VaR limit before the fund entered into any derivatives transactions.

Increasing the relative VaR test from the 200% relative VaR limit applicable to funds generally under the rule, to the 250% relative VaR limit for closed-end funds with equity-based leverage, is designed to reflect those funds' ability to use equity-based leverage under the Investment Company Act. Adding an additional 50% to the relative VaR limit is designed to reflect the additional extent to which closed-end funds are permitted to obtain equity-based

³⁹⁰ See Dechert Comment Letter I; NYC Bar Comment Letter; Nuveen Comment Letter; Invesco Comment Letter (recommending an approach that includes a 50% maximum in additional relative VaR limit for closed-end funds). A few commenters provided, as examples, closed-end funds with higher relative VaR limits than what the Commission proposed, which is consistent with the 250% relative VaR limit supported by other commenters. *See, e.g.*, ICI Comment Letter; PIMCO Comment Letter; *see also* SIFMA AMG Comment Letter (suggesting raising the relative VaR limit applicable to open-end funds by 25% for closed-end funds and BDCs); Nuveen Comment Letter (suggesting also 225% relative VaR limit for closed-end funds).

leverage under the Investment Company Act. For example, a closed-end fund, like a mutual fund, with \$100 in assets and no liabilities or senior securities outstanding could borrow \$50 from a bank. A closed-end fund, unlike a mutual fund, could also raise an additional \$50 by issuing preferred stock.

We also believe that, because the Investment Company Act permits closed-end funds to obtain greater leverage than open-end funds, and many closed-end funds take advantage of this flexibility, investors may expect closed-end funds to exhibit a greater degree of leverage risk. We believe these factors support higher VaR limits on fund leverage risk for closed-end funds with equity-based leverage in recognition that the VaR tests are designed to provide an outer bound on fund leverage risk.³⁹¹ This provision is designed to provide incrementally higher VaR limits only for closed-end funds that raise capital by issuing preferred stock to investors in the ordinary course of pursuing their investment strategy. If a closed-end fund does not obtain equity-based structural leverage, however, the fund would be subject to the same 200% relative VaR limit as other funds.

We considered the alternative approaches suggested by commenters that would adjust a closed-end fund's relative VaR limit based on the extent to which the closed-end fund had preferred stock outstanding (or based on the disclosed intended amount of such issuances). These approaches would result in a relative VaR limit that would be more closely tied to the amount of a closed-end fund's issuance of preferred stock. These approaches, however, would introduce certain compliance and regulatory challenges. For example, approaches based on the percentage of a fund's net asset value represented by preferred stock would result in a fund's relative VaR limit changing each day, which could raise compliance challenges.³⁹² Although one commenter suggested using an approach that considers a fund's intended issuance of preferred stock to address this concern, that approach also could raise compliance and regulatory concerns by

³⁹¹ See, e.g., Nuveen Comment Letter; Invesco Comment Letter; NYC Bar Comment Letter.

³⁹² See ICI Comment Letter.

basing a leverage risk limit on a fund's intended characteristics.³⁹³ This could raise questions about the appropriate limit for a fund where the fund's actual structural leverage differs from a purported or intended level, particularly if those differences persist for a long period of time.

Although the final rule's provision for equity-based leverage is available to both registered closed-end funds and BDCs, we are not adopting a separate higher leverage limit for BDCs specifically. Although some commenters urged that their suggestions for registered closed-end funds also should apply to BDCs, commenters did not suggest that the rule should provide higher VaR limits for BDCs than for registered closed-end funds.³⁹⁴

As discussed in the proposal, the Investment Company Act provides greater flexibility for BDCs to issue senior securities.³⁹⁵ BDCs, however, generally do not use derivatives or do so only to a limited extent. In the proposal, the Commission explained that to help evaluate the extent to which BDCs use derivatives, the staff sampled 48 of the current 99 BDCs by reviewing their most recent financial statements filed with the Commission.³⁹⁶ As discussed in the proposal, based on this analysis the Commission believed that most BDCs either would not use derivatives or would rely on the exception for limited derivatives users. Commission staff updated this analysis by reviewing the most recent financial statements that the same previously-sampled 48 BDCs (or their successor funds) filed with the Commission.³⁹⁷ The staff's sample included both BDCs with shares listed on an exchange and BDCs whose shares are not listed. The sampled BDCs' net assets ranged from \$27 million to \$6.6 billion. Of the 48 sampled, 59.1% did not report any derivatives holdings, and a further 31.8% reported using derivatives with gross notional amounts below 10% of net assets.³⁹⁸ We therefore believe that most BDCs either would not use derivatives or would rely on the exception for limited derivatives users.

³⁹³ *See id.*

³⁹⁴ *See* NYC Bar Comment Letter; SIFMA AMG Comment Letter; Nuveen Comment Letter.

³⁹⁵ *See* Proposing Release, *supra* footnote 1, at section II.D.2.

³⁹⁶ *See id.*

³⁹⁷ As of July 2020, there were 99 BDCs.

³⁹⁸ *See infra* footnote 512 and accompanying paragraph (discussing BDCs that use derivatives and would qualify as limited derivatives users).

In addition, the greater flexibility for BDCs to issue senior securities allows them to provide additional equity or debt financing to the “eligible portfolio companies” in which BDCs are required to invest at least 70% of their total assets. Derivatives transactions, in contrast, generally will not have similar capital formation benefits for portfolio companies unless the fund’s counterparty makes an investment in the underlying reference assets equal to the notional amount of the derivatives transaction. Allowing BDCs to leverage their portfolios with derivatives to a greater extent than other closed-end funds therefore would not appear to further the capital formation benefits that underlie BDCs’ ability to obtain additional leverage under the Investment Company Act. We also understand that, even when BDCs do use derivatives more extensively, derivatives generally do not play as significant of a role in implementing the BDCs’ strategies, as compared to many other types of funds that use derivatives extensively. BDCs’ “eligible portfolio companies” investment requirement may limit the role that derivatives can play in a BDC’s portfolio relative to other kinds of funds that would generally execute their strategies primarily through derivatives transactions (*e.g.*, a managed futures fund). The final rule does not restrict a fund from issuing senior securities subject to the limits in section 18 to the full extent permitted by the Investment Company Act.³⁹⁹

3. Absolute VaR Test

Under the final rule, a fund complying with the absolute VaR test will satisfy the test if its VaR does not exceed 20% of the value of the fund’s net assets, unless the fund is a closed-end fund that has then-outstanding preferred stock.⁴⁰⁰ For such closed-end funds, the VaR must not

³⁹⁹ For purposes of calculating asset coverage, as defined in section 18(h), BDCs have used derivatives transactions’ notional amounts, less any posted cash collateral, as the “amount of senior securities representing indebtedness” associated with the transactions. We believe this approach—and not the transactions’ market values—represents the “amount of senior securities representing indebtedness” for purposes of this calculation. These issues do not tend to arise with respect to open-end funds and registered closed-end funds. Open-end funds cannot enter into derivatives transactions under section 18, absent relief from that section’s requirements, because section 18 limits open-end funds’ senior securities to bank borrowings. Section 18(c) also limits a registered closed-end fund’s ability to enter into derivatives transactions absent such relief.

⁴⁰⁰ See rule 18f-4(a) (defining the term “absolute VaR test”).

exceed 25% of the value of the fund's net assets.⁴⁰¹ This is a modification from the proposed rule, which would have limited a fund's VaR to 15% of the value of its net assets.⁴⁰²

In proposing a 15% absolute VaR limit, the Commission considered the comparison of a fund complying with the absolute VaR test and a fund complying with the relative VaR test. In the proposal, the Commission explained that for funds that rely on the absolute VaR test a 15% absolute VaR limit would provide approximately comparable treatment with funds that rely on the relative VaR test and use the S&P 500 as their designated index during periods where the S&P 500's VaR is approximately equal to the historical mean. In the proposal, the Commission requested comment on the appropriate absolute VaR test limit, including specifically requesting comment on a 20% absolute VaR test limit, and discussed the 20% absolute VaR limit applicable to UCITS funds.⁴⁰³

Many commenters urged the Commission to raise the absolute VaR limit from 15% to 20% of a fund's net assets.⁴⁰⁴ In urging the Commission to raise the relative VaR limit from 150% to 200%, commenters also urged a parallel increase in the absolute VaR limit from 15% to 20%.⁴⁰⁵ They stated that this would be consistent with the analysis in the Proposing Release if, as commenters suggested, the Commission were to increase the relative VaR test to 200%.

A number of commenters agreed with the Commission's stated view in the Proposing Release that the VaR tests would serve as an outside limit on fund leverage risk, which would be consistent with the Commission's estimates that only a small number of funds, if any, would have to adjust their portfolios to comply with the VaR-based test.⁴⁰⁶ Commenters stated,

⁴⁰¹ See *id.*

⁴⁰² See proposed rule 18f-4(a).

⁴⁰³ See Proposing Release, *supra* footnote 1, at section II.D.3.

⁴⁰⁴ See Capital Group Comment Letter; ISDA Comment Letter; Dechert Comment Letter I; ICI Comment Letter; AQR Comment Letter I; ABA Comment Letter; BlackRock Comment Letter; Chamber Comment Letter; Franklin Comment Letter; J.P. Morgan Comment Letter; Eaton Vance Comment Letter; PIMCO Comment Letter; Putnam Comment Letter; T. Rowe Price Comment Letter; Vanguard Comment Letter.

⁴⁰⁵ See, e.g., Invesco Comment Letter; MFA Comment Letter; T. Rowe Price Comment Letter.

⁴⁰⁶ See, e.g., ICI Comment Letter; AQR Comment Letter I; Invesco Comment Letter.

however, that more funds would fail a 15% absolute VaR limit than the Commission contemplated in the Proposing Release, which commenters suggested indicates that the proposed 15% absolute VaR limit would not function as an outside limit on fund leverage risk as intended.⁴⁰⁷ Commenters suggested that a higher absolute VaR limit of 20% would more effectively achieve the Commission's goal of imposing an outside limit on fund leverage risk and would allow a fund's derivatives risk management program to provide day-to-day constraints on fund risk instead of the proposed absolute VaR limit.⁴⁰⁸

To support its urging the Commission to raise the absolute VaR limit to 20%, one commenter analyzed the VaR of the S&P 500 as the risk-based reference point for setting the absolute VaR limit and highlighted that the S&P 500 itself would breach a 15% absolute VaR limit for specific periods of time.⁴⁰⁹ The commenter noted that the S&P 500 would continue to breach the proposed 15% limit for a nearly three-year period, including after the volatility of the index came back down to typical historical levels following the 2008-2009 financial crisis. The commenter also observed the magnitude of the S&P 500's breach of the proposed 15% limit, stating that a fund taking risk equivalent to the S&P 500 would need to reduce its risk by 32% to comply with the proposed 15% VaR limit and would need to do this two years after the 2008-2009 crisis.

⁴⁰⁷ See, e.g., ICI Comment Letter (providing survey data showing that during periods of stressed market conditions, about one in four survey respondents indicated that their fund would breach an absolute VaR limit of 15%); BlackRock Comment Letter (stating that during March 2020 market volatility related to the COVID-19 global health pandemic, most of its funds would have remained under a 20% absolute VaR limit, but some would have breached a 15% absolute VaR limit); see also Proposing Release, *supra* footnote 1, at n.516 and accompanying paragraph.

⁴⁰⁸ See, e.g., AQR Comment Letter II; ISDA Comment Letter; SIFMA AMG Comment Letter; T. Rowe Comment Letter.

⁴⁰⁹ See AQR Comment Letter I (stating that other widely-known benchmarks composed of small market capitalization stocks that are more volatile than the S&P 500, such as the Russell 2000, would be in breach more often than the S&P 500, supporting the appropriateness of raising the absolute VaR limit to 20%); see also J.P. Morgan Comment Letter (supporting an absolute VaR limit of 20% and suggesting that the S&P 500 volatility since inception as used in the Commission staff's analysis is less relevant than the more recent market conditions that reflect increases in market volatility since the 1980s); MFA Comment Letter.

Other commenters stated that raising the absolute VaR limit to 20% would be consistent with the UCITS framework.⁴¹⁰ Commenters suggested that providing a 20% absolute VaR limit in rule 18f-4 would result in compliance and operational efficiencies for advisers to both UCITS funds and funds subject to rule 18f-4.

After considering comments, we are adopting an absolute VaR limit of 20% of a fund's net assets. The 20% absolute VaR limit is based on the same analysis that the Commission used to propose a 15% absolute VaR limit, as we continue to believe it is an appropriate basis to set this limit, and adjusts the absolute VaR limit to 20% in light of the increases we are adopting to the proposed relative VaR limit. For example, under the final rule, a fund that uses the S&P 500 as its benchmark index, as many funds do, would be permitted to have a VaR equal to 200% of the VaR of the S&P 500 if the fund uses that index as its designated index.⁴¹¹ Setting the level of loss in the absolute VaR test at 20% of a fund's net assets would therefore provide approximately comparable treatment for funds that rely on the absolute VaR test and funds that rely on the relative VaR test with a 200% limit and use the S&P 500 as their designated index during periods where the S&P 500's VaR is approximately equal to the historical mean. Moreover, we recognize there are some regulatory and compliance efficiencies in setting the absolute VaR limit at 20% because some fund complexes have existing regulatory and compliance infrastructures for UCITS funds that comply with a 20% absolute VaR limit.⁴¹²

⁴¹⁰ See, e.g., ABA Comment Letter; BlackRock Comment Letter; Eaton Vance Comment Letter.

⁴¹¹ The Division of Economic and Risk Analysis ("DERA") staff analyzed the S&P 500 because funds often select broad-based large capitalization equities indexes such as the S&P 500 for performance comparison purposes, including funds that are not broad-based large capitalization equity funds. This is based on staff experience and analysis of data obtained from Morningstar. Many investors may therefore understand the risk inherent in these indexes as the level of risk inherent in the markets generally.

DERA staff calculated the VaR of the S&P 500, using the parameters specified in this rule over various time periods. DERA staff's calculation of the S&P 500's VaR since inception, for example, produced a mean VaR of approximately 10.5%, although the VaR of the S&P 500 varied over time.

DERA staff calculated descriptive statistics for the VaR of the S&P 500 using Morningstar data from March 4, 1957 to June 30, 2020, based on daily VaR calculations, each using three years of prior return data and calculated using historical simulation at a 99% confidence level for a 20-day horizon using overlapping observations.

⁴¹² As discussed in section II.D.2.c.i above, we recognize that many advisers to U.S. funds using

We also are modifying the proposed rule to provide a higher absolute VaR test limit of 25% of the fund's net assets in the case of a closed-end fund with then-outstanding shares of preferred stock. This reflects the parallel clause we added to the definition of the term "relative VaR test." We are increasing the absolute VaR limit for certain closed-end funds for the same reasons we are increasing the relative VaR limit for these funds.⁴¹³

One commenter also suggested that the Commission modify the absolute VaR test to provide that a fund complies if it does not exceed either: (1) the absolute VaR limit, which the commenter urged be at least 20%; or (2) 150% of the then-current VaR of the S&P 500.⁴¹⁴ The effect of this suggestion, if we incorporated it into the final rule (which, as adopted, includes a 200% relative VaR limit), would always permit a fund to have a portfolio VaR of 20% or less of the fund's net assets. Moreover, this suggestion would permit a fund to increase its portfolio VaR beyond this level to 200% of the S&P 500's VaR, if the fund's portfolio VaR were to exceed 20%. This suggested approach would therefore allow a fund's permissible VaR to increase in times when market volatility increases and this increase is reflected in the S&P 500's VaR.

We are not including this suggested approach in the final rule. In determining the level of the absolute VaR test, we have used the mean VaR of S&P 500 as a reference point for this analysis to represent the level of risk that investors may understand as inherent in the markets generally. If a fund is relying on the absolute VaR test, it is because its derivatives risk manager reasonably determined that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test. It would be inconsistent with the rule's

derivatives transactions also advise, or may have affiliates that advise, UCITS funds that comply with UCITS requirements. Providing a degree of consistency between the final rule and UCITS requirements therefore may provide the compliance and operational efficiencies identified by commenters, including by facilitating advisers' ability to offer similar strategies in the United States and Europe.

⁴¹³ See *supra* section II.D.2.c.ii (discussing the 250% relative VaR limit for closed-end funds that have shares of preferred stock outstanding).

⁴¹⁴ See AQR Comment Letter I. The commenter raised concerns that in particular funds pursuing a volatility-targeting strategy would be adversely affected by the absolute VaR test under the proposal because of the counter-cyclical investment nature of these funds, which the commenter suggested may be addressed by this modification. The commenter also suggested an alternative method of calculating VaR to address these concerns, which we discuss below in section II.D.5.

framework to include a provision that effectively uses the S&P 500 as a fund’s designated index regardless of the fund’s investments and only during periods where this relative VaR approach permits a fund’s VaR to exceed 20%, but not during other market conditions. This approach also could result in a fund being permitted to take on substantial additional risk—and potentially substantially additional leverage depending on the fund’s investments—in periods when market risks already are elevated.

The relative VaR test is designed to address concerns about compliance with the VaR test during stressed periods because, although the fund’s VaR may increase during these periods, the VaR of the fund’s designated reference portfolio would be expected to increase as well. A fund can rely on the relative VaR test if the fund’s designated reference portfolio reflects the markets or asset classes in which the fund invests and meets the rule’s other requirements. This is true even if the fund’s strategy is focused on an absolute return rather than a level of return relative to an index or market. We believe such a portfolio would provide a more appropriate reference portfolio for a fund’s relative VaR test than prescribing the S&P 500 in all cases.

4. Funds Limited to Certain Investors

The final rule does not provide an exemption from the rule’s VaR-based limit for funds that limit their investors to “qualified clients,” as defined in rule 205-3 under the Advisers Act, and/or are sold exclusively to “qualified clients,” “accredited investors,” or “qualified purchasers.”⁴¹⁵ A few commenters urged the Commission to exempt closed-end funds that limit

⁴¹⁵ An “accredited investor” is defined in rules 215 and 501(a) under the Securities Act of 1933 and is intended to identify “investors that have sufficient knowledge and expertise to participate in investment opportunities that do not have the rigorous disclosure and procedural requirements, and related investor protections, provided by registration under the Securities Act of 1933.” *See, e.g.,* Amending the “Accredited Investor” Definition, Securities Act Release No. 10824 (Aug. 26, 2020) [85 FR 64234 (Oct. 9, 2020)].

A “qualified purchaser” is defined in section 2(a)(51) of the Investment Company Act and includes natural persons who own not less than \$5 million in investments, family-owned companies that own not less than \$5 million in investments, certain trusts, and persons, acting for their own accounts or the accounts of other qualified purchasers, who in the aggregate own and invest on a discretionary basis, not less than \$25 million in investments (*e.g.,* institutional investors). *See id.* at n.8.

their investor base in this way from the rule's VaR limits.⁴¹⁶ One of these commenters urged that, instead of being subject to the VaR tests, these funds should be permitted to set and disclose limits of their own choosing.⁴¹⁷

Commenters asserted that complying with the VaR-based limit on fund leverage risk would negatively affect how these funds operate and the investment strategies they can pursue.⁴¹⁸ Commenters asserted that because their investors are sophisticated, with the ability to understand the risks associated with a fund obtaining significant derivatives exposure, the funds should not be subject to VaR testing because these investors do not require the same investor protections as other registered funds.⁴¹⁹ Commenters urged that failing to provide these funds an exemption would encourage their investors to move to private funds, losing investor protections that the Investment Company Act provides.⁴²⁰

The final rule does not provide an exemption for these funds from the rule's VaR test. To the extent a fund that limits its investor base as described by these commenters is able to qualify for the exclusions from the investment company definition in sections 3(c)(1) or 3(c)(7), the fund can operate as a private fund under those exclusions and will not be subject to section 18.⁴²¹

⁴¹⁶ Some of these commenters recommended an exemption from the VaR tests for closed-end funds that limit their investors to qualified clients. *See* Comment Letter of Dechert LLP (Mar. 24, 2020) ("Dechert Comment Letter II"); Kramer Levin Comment Letter. Other commenters urged exemptions more broadly for closed-end funds sold exclusively to accredited investors, qualified purchasers, or qualified clients. *See* NYC Bar Comment Letter; ABA Comment Letter.

⁴¹⁷ *See* ABA Comment Letter.

⁴¹⁸ *See* Dechert Comment Letter II (stating that compliance with the rule "could significantly and negatively impact investment performance and create unnecessary costs for investors [of qualified client funds]"); Kramer Levin Comment Letter.

⁴¹⁹ *See* Kramer Levin Comment Letter (stating that "[u]nlike mutual funds, [closed-end funds that limit their investors to 'qualified clients'] are only offered to sophisticated, high net worth investors (with a \$2.1 million net worth minimum), who not only certify as to their financial wherewithal but also acknowledge all of the risks involved in investing in such [funds]"); Dechert Comment Letter II; *contra* CFA Comment Letter at 9 (stating that that these "exotic-hedge fund like strategies that use extensive leverage . . . are more appropriately reserved for the unregistered space where, at least in theory, investors are sophisticated, can withstand losses resulting from risky strategies, and are able to access information that would enable them to make informed investment decisions").

⁴²⁰ *See* ABA Comment Letter; Dechert Comment Letter II; Kramer Levin Comment Letter.

⁴²¹ Section 3(c)(1) of the Investment Company Act excludes from the definition of "investment company" any issuer whose outstanding securities (other than short-term paper) are beneficially owned by not more than 100 persons, and which is not making and does not presently propose to

Private funds can pursue complex derivatives strategies with significant leverage. Where a fund is registered under the Investment Company Act (or regulated under the Act in the case of BDCs), however, the fund remains subject to all applicable provisions of the Act and its rules, notwithstanding its investor base.⁴²² The Investment Company Act's requirements for registered investment companies and BDCs generally do not vary based on the nature of the fund's investors.

5. Choice of Model and Parameters for VaR Test

We are adopting the VaR model and parameters for the VaR test as proposed. The final rule will require a VaR model to take into account and incorporate certain market risk factors associated with a fund's investments and provide parameters for the VaR calculation's confidence level, time horizon, and historical market data. The final rule also will not require a fund to use the same VaR model for calculating its portfolio's VaR and the VaR of its designated reference portfolio. We discuss each of these requirements below in addition to certain VaR calculation considerations raised by commenters.

Risk Factors and Methodologies

As proposed, the final rule will require that any VaR model a fund uses for purposes of the relative or absolute VaR test take into account and incorporate all significant, identifiable market risk factors associated with a fund's investments.⁴²³ The rule includes a non-exhaustive list of common market risk factors that a fund must account for in its VaR model, if applicable.

make a public offering of its securities. Section 3(c)(7) of the Investment Company Act excludes from the definition of "investment company" any issuer whose outstanding securities are owned exclusively by persons who, at the time of acquisition of such securities, are "qualified purchasers," and which is not making and does not at that time propose to make a public offering of its securities.

⁴²² The final rule does include modifications to the proposed VaR tests, including commenter suggestions to raise the VaR limits from the proposed levels. *See* Kramer Levin Comment Letter (recommending that closed-end funds under the rule be subject, as applicable, to a limit of 200% relative VaR or 20% absolute VaR). We also modified the proposed rule to take account of closed-ends' funds ability to issue preferred stock by providing these funds a higher VaR limit. We believe these and other modifications to the final rule should help to address the concerns commenters raised about the final rule's impact on the funds' strategies.

⁴²³ *See* rule 18f-4(a) (defining the term "value-at-risk" or "VaR" in the final rule); proposed rule 18f-4(a) (defining the term "value-at-risk" or "VaR" in the proposed rule).

These market risk factors are: (1) equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk; (2) material risks arising from the nonlinear price characteristics of a fund's investments, including options and positions with embedded optionality; and (3) the sensitivity of the market value of the fund's investments to changes in volatility.⁴²⁴ VaR models are often categorized according to three modeling methods—historical simulation, Monte Carlo simulation, or parametric models.⁴²⁵ Each method has certain benefits and drawbacks, which may make a particular method more or less suitable, depending on a fund's strategy, investments and other factors. In particular, some VaR methodologies may not adequately incorporate all of the material risks inherent in particular investments, or all material risks arising from the nonlinear price characteristics of certain derivatives.⁴²⁶ By specifying certain parameters but not prescribing particular VaR models, the final rule is designed to allow each fund to use a VaR model that is appropriate for the fund's investments. The commenters who addressed this provision supported it.⁴²⁷

⁴²⁴ See *id.*

⁴²⁵ Historical simulation models rely on past observed historical returns to estimate VaR. Historical VaR involves taking a fund's current portfolio, subjecting it to changes in the relevant market risk factors observed over a prior historical period, and constructing a distribution of hypothetical profits and losses. The resulting VaR is then determined by looking at the largest (100 minus the confidence level) percent of losses in the resulting distribution.

Monte Carlo simulation uses a random number generator to produce a large number (often tens of thousands) of hypothetical changes in market values that simulate changes in market factors. These outputs are then used to construct a distribution of hypothetical profits and losses on the fund's current portfolio, from which the resulting VaR is ascertained by looking at the largest (100 minus the confidence level) percent of losses in the resulting distribution.

Parametric methods for calculating VaR rely on estimates of key parameters (such as the mean returns, standard deviations of returns, and correlations among the returns of the instruments in a fund's portfolio) to create a hypothetical statistical distribution of returns for a fund, and use statistical methods to calculate VaR at a given confidence level.

See Proposing Release, *supra* footnote 1, at n.227.

⁴²⁶ For example, some parametric methodologies may be more likely to yield misleading VaR estimates for assets or portfolios that exhibit non-linear returns, due, for example, to the presence of options or instruments that have embedded optionality (such as callable or convertible bonds). See, e.g., Thomas J. Linsmeier & Neil D. Pearson, *Value at Risk*, 56 Journal of Financial Analysts 2 (Mar.-Apr. 2000) ("Linsmeier & Pearson") (stating that historical and Monte Carlo simulation "work well regardless of the presence of options and option-like instruments in the portfolio. In contrast, the standard [parametric] delta-normal method works well for instruments and portfolios with little option content but not as well as the two simulation methods when options and option-like instruments are significant in the portfolio.").

⁴²⁷ See J.P. Morgan Comment Letter; BlackRock Comment Letter; Franklin Comment Letter.

Confidence Level and Time Horizon

As proposed, the final rule requires a fund's VaR model to use a 99% confidence level and a time horizon of 20 trading days.⁴²⁸ VaR models that use relatively high confidence levels and longer time horizons—as the final rule parameters reflect—result in a focus on more-“extreme” but less-frequent losses. This is because a fund's VaR model will be based on a distribution of returns, where a higher confidence level would go further into the tail of the distribution (*i.e.*, more-“extreme” but less-frequent losses) and a longer time horizon would result in larger losses in the distribution (*i.e.*, losses have the potential to be larger over twenty days than over, for example, one day). The VaR tests in the final rule, as proposed, are designed to measure, and seek to limit the severity of, these less-frequent but larger losses.

Many commenters provided general support for a 99% confidence level for the rule's VaR test.⁴²⁹ Several commenters that supported this parameter suggested providing guidance regarding confidence interval rescaling, specifically from a 95% confidence level to a 99% confidence level.⁴³⁰ Under this approach, a fund would first compute its VaR at a 95% confidence level, which will involve more observations because this approach looks to losses in 5% of the distribution rather than 1%. The fund would then use the statistical relationship of the normal distribution between the 99th percentile and the 95th percentile, using the ratio of their respective Z-scores, in calculating a fund's VaR consistent with the VaR model and parameters requirements under the rule.⁴³¹

Commenters stated that this approach would produce more stable results because the VaR calculation would be based on a larger number of observations. For example, one commenter

⁴²⁸ See rule 18f-4(a); proposed rule 18f-4(a).

⁴²⁹ See, *e.g.*, J.P. Morgan Comment Letter; AQR Comment Letter I; BlackRock Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter; SIFMA AMG Comment Letter. *But see* ISDA Comment Letter (suggesting the rule permit a fund to determine its own confidence level from 95% to 99% for purposes of the rule's VaR test).

⁴³⁰ See AQR Comment Letter I; BlackRock Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter; SIFMA AMG Comment Letter.

⁴³¹ The Z-scores for these confidence levels are: (1) the value of the 99th percentile minus the population mean and (2) the value of the 95th percentile minus the population mean, both divided by the population standard deviation.

stated that while there are benefits to selecting a 99% confidence level, one of the tradeoffs is that being so far into the “tail” of the distribution of returns for VaR calculations implies an inherently imprecise, unstable, and unnecessarily sensitive metric of risk.⁴³² The commenter stated that, for example, if a fund calculated a 3-year VaR with 20-day non-overlapping periods, the 99% VaR is based on less than one observation. Rescaling a VaR calculated at a 95% confidence to a 99% confidence level would address the effects of having a limited number of observations.⁴³³ Two commenters similarly stated that permitting rescaling from a 95% confidence level to a 99% confidence level is useful as another means for obtaining additional observations, when compared to increasing the number of observations by using overlapping periods, because it better addresses concerns with small sample bias in estimating VaR at higher confidence levels.⁴³⁴ One commenter stated that this confidence level scaling would ensure that the VaR outputs are appropriately representative and take into account unusual volatility periods, and in this commenter’s view, ensure greater reliability of the model outputs.⁴³⁵ A few commenters stated that this also would align with other regulatory regimes, creating regulatory compliance efficiencies for funds complying with the rule.⁴³⁶ Commenters also supported the Commission’s statement in the Proposing Release that funds could scale a one-day VaR calculation to a 20-day calculation for purposes of the rule under appropriate circumstances and urged that permitting confidence level scaling would likewise be appropriate. With respect to the proposed time horizon of 20 trading days, the Commission received one comment that supported the proposed parameter and another that did not object to it and noted that this and other parameters generally are in line with UCITS requirements.⁴³⁷

⁴³² See AQR Comment Letter I.

⁴³³ See *id.*

⁴³⁴ See ICI Comment Letter; Invesco Comment Letter.

⁴³⁵ See SIFMA AMG Comment Letter.

⁴³⁶ See BlackRock Comment Letter; Dechert Comment Letter I; ICI Comment Letter.

⁴³⁷ See J.P. Morgan Comment Letter; ICI Comment Letter.

We agree with commenters that it is a commonly used technique in performing VaR calculations to determine a 99% confidence level VaR by rescaling a calculation initially performed at a 95% confidence level. Like the time-scaling technique the Commission discussed in the proposal, it may be beneficial in that it would allow a fund's VaR calculation to take into account additional observations while still complying with the final rule's VaR tests calibrated to a 99% confidence level and a time horizon of 20 trading days.⁴³⁸ We believe that both approaches are appropriate for purposes of the final rule.

Historical Market Data

We are adopting the requirement, as proposed, that the fund's chosen VaR model must be based on at least three years of historical market data. As discussed in the proposal, we understand that the availability of data is a key consideration when calculating VaR, and that the length of the data observation period may significantly influence the results of a VaR calculation. When proposing this requirement, the Commission recognized that a shorter observation period means that each observation will have a greater influence on the result of the VaR calculation (as compared to a longer observation period), such that periods of unusually high or low volatility could result in unusually high or low VaR estimates.⁴³⁹ Longer observation periods, however, can lead to data collection problems, if sufficient historical data is not available.⁴⁴⁰

The Commission received a few comments on this aspect of the proposal. One commenter suggested that the rule should require at a minimum five years of historical data rather than the proposed three years of historical data requirement.⁴⁴¹ This commenter stated that

⁴³⁸ See Proposing Release, *supra* footnote 1, at n.230.

⁴³⁹ See Linsmeier & Pearson, *supra* footnote 426 (stating that, because historical simulation relies directly on historical data, a danger is that the price and rate changes in the last 100 (or 500 or 1,000) days might not be typical. For example, if by chance the last 100 days were a period of low volatility in market rates and prices, the VaR computed through historical simulation would understate the risk in the portfolio).

⁴⁴⁰ See Proposing Release, *supra* footnote 1, at n.178 and accompanying text (citing Kevin Dowd, *An Introduction to Market Risk Measurement* (Oct. 2002) at 68 (stating that "[a] long sample period can lead to data collection problems. This is a particular concern with new or emerging market instruments, where long runs of historical data don't exist and are not necessarily easy to proxy").

⁴⁴¹ See Better Markets Comment Letter. This commenter also suggested stressed VaR, as discussed above (suggesting that the historical data include a one-year period of extreme but plausible

five years would be more representative of market conditions, but not so long as to mute the effects of extreme market events. Another commenter, however, stated that it supported the proposed three years of historical data requirement.⁴⁴² Another commenter expressly stated that it did not object to the proposed three-year historical data requirement.⁴⁴³

We are not persuaded to extend the requirement, as suggested by one commenter, to at least five years of historical data.⁴⁴⁴ Funds with newer or novel investment exposures, for example, may experience challenges in collecting this data set. The rule's historical market data requirement is designed to permit a fund to base its VaR estimates on a meaningful number of observations, while also recognizing that requiring a longer period could make it difficult for a fund to obtain sufficient data to estimate VaR for the instruments in its portfolio.⁴⁴⁵ We believe requiring a fund's chosen VaR model to be based on at least three years of historical market data strikes an appropriate balance.⁴⁴⁶ Derivatives risk managers can base their VaR calculations on additional historical data if they choose.

VaR Models for the Fund's Portfolio and Its Designated Reference Portfolio

The final rule, as proposed, does not require a fund to apply its VaR model consistently (*i.e.*, the same VaR model applied in the same way) when calculating (1) the VaR of its portfolio and (2) the VaR of its designated reference portfolio. The rule will, however, require that VaR

market conditions). *See supra* section II.D.1.

⁴⁴² *See* J.P. Morgan Comment Letter.

⁴⁴³ *See* ICI Comment Letter.

⁴⁴⁴ *See* Better Markets Comment Letter.

⁴⁴⁵ *See* Michael Minnich, *Perspectives On Interest Rate Risk Management For Money Managers And Traders* (Frank Fabozzi, ed.) (1998) (stating that for historical simulation, “[l]onger periods of data have a richer return distribution while shorter periods allow the VAR to react more quickly to changing market events” and that “[t]hree to five years of historical data are typical”); *see also* Darryll Hendricks, *Evaluation of Value-at-Risk Models Using Historical Data*, FRBNY Economic Policy Review (Apr. 1996) (finding that, when using historical VaR, “[e]xtreme [confidence level] percentiles such as the 95th and particularly the 99th are very difficult to estimate accurately with small samples” and that the complete dependence of historical VaR models on historical observation data “to estimate these percentiles directly is one rationale for using long observation periods”).

⁴⁴⁶ The three-year data requirement applies to all VaR calculations under the rule, as proposed, rather than only historical simulation as the Commission proposed in 2015. All VaR models—not just historical simulation—rely on historical data. The Commission received no comments on this aspect of the proposal.

calculations comply with the same VaR definition under the rule and its specified model requirements.

As proposed, we have determined not to adopt a model consistency requirement because it could prevent funds from using less-costly approaches. For example, under the final rule's approach, in many cases a fund could calculate the VaR of a designated index based on the index levels over time without having to obtain more-detailed information about the index constituents. A fund also may obtain the VaR from a third-party vendor instead of analyzing it in-house. A model consistency requirement could preclude these approaches, however, because a fund might not be able apply the same approach to its portfolio.⁴⁴⁷ Commenters supported this approach.⁴⁴⁸ We believe similar considerations apply to funds using their securities portfolios in lieu of a designated index. For example, such a fund may have a securities portfolio composed solely of listed equities securities while also writing options or entering into other derivatives transactions with non-linear returns. A simpler VaR model may be appropriate to calculate the VaR of the fund's securities portfolio, and a comparatively more complex VaR model could be more appropriate for calculating the VaR of the fund's total portfolio that includes the fund's derivatives transactions.

Other VaR Calculation Considerations

Funds of funds. One commenter requested guidance on how the VaR tests should be applied to investments by a fund that invests in other registered investment companies ("underlying funds").⁴⁴⁹ This commenter observed that calculating VaR based on the acquiring fund's holdings can be challenging because an acquiring fund's adviser may not have daily

⁴⁴⁷ For example, if a fund invested significantly in options, it generally would not be appropriate to use certain parametric VaR models. The fund might instead use Monte Carlo simulation, which is more computationally intensive and takes more time to perform. A model consistency requirement would require the fund to apply the same Monte Carlo simulation model to its unleveraged designated index or securities portfolio, for which a parametric or other simpler and less costly VaR model might be appropriate.

⁴⁴⁸ See BlackRock Comment Letter; Franklin Comment Letter (stating its support for the proposed VaR model calculation flexibility and noting that it is supported by the Commission's discussion in the proposal regarding index licensing fees).

⁴⁴⁹ See Fidelity Comment Letter.

transparency into the holdings of underlying funds. Accordingly, the commenter suggested we confirm that a fund need only comply with the rule if the fund itself directly engages in derivatives transactions and need not look through to the holdings of underlying funds. The commenter also sought confirmation that, when an acquiring fund does enter into derivatives transactions and also holds shares of underlying funds, that the acquiring fund may calculate its VaR by taking into account the historic return of the acquiring fund rather than determining the acquiring fund's VaR based on the aggregate VaR of the underlying funds.

We agree that, in general, an acquiring fund that does not use derivatives transactions would not be required to comply with the final rule or to look through to an underlying registered investment company or BDC's use of derivatives transactions for purposes of determining the acquiring fund's derivatives exposure. These underlying funds, themselves, will be subject to rule 18f-4 with respect to their investments in derivatives.⁴⁵⁰ If a fund enters into derivatives transactions indirectly through controlled foreign corporations, these derivatives transactions are treated as direct investments of the fund for regulatory and other purposes, including for purposes of section 18 and therefore for rule 18f-4.

When an acquiring fund does engage in derivatives transactions beyond the 10% limited derivatives user threshold and also holds shares of underlying funds, the acquiring fund will be required under the rule to calculate its own VaR. In these circumstance we believe that it would be sufficient for the acquiring fund to use the historic returns of the underlying funds when determining the acquiring fund's VaR, in recognition of the compliance challenges associated with obtaining daily transparency into the holdings of the underlying funds. We do not believe it would be appropriate, however, for the acquiring fund (or any other fund under the rule) to use

⁴⁵⁰ However, section 48(a) of the Act provides that it shall be unlawful for any person, directly or indirectly, to cause to be done any act or thing through or by means of any other person which it would be unlawful for such person to do under the provisions of the Investment Company Act or any rule, regulation, or order thereunder. This provision prevents a fund from investing through a registered investment company or BDC, or a private fund or other pooled investment vehicle, as a means of directly or indirectly causing to be done any act or thing through or by means of any other person which it would be unlawful under section 18 and the final rule for the acquiring fund to do directly.

its own historic return for calculating VaR. The acquiring fund will have information about its own direct investments and can calculate its VaR taking these investments into account rather than looking to the fund's historic return, which will include return information that may be based on investments that differ from those in the fund's current portfolio.

Volatility-targeting funds. One commenter suggested that the Commission permit different VaR parameters for funds that target a constant volatility or volatility range ("volatility-targeting funds").⁴⁵¹ Such funds generally will increase the size of their positions when market risks are lower and decrease the size of their positions when market risks are higher. The commenter expressed concerns about applying a VaR test to such funds, particularly in periods of low volatility that follow high-volatility periods. In this case, the fund would increase the size of its position because of the low volatility in the market but, when calculating the fund's VaR, effectively would be simulating how the fund's current portfolio would perform during the past high-volatility period. The commenter believed that this would not measure effectively the fund's risk because during the prior high-volatility periods simulated in the VaR model, the fund's positions would have been smaller than in its current portfolio because volatility was higher.

The commenter urged that the final rule permit this fund's derivatives risk manager to use a VaR model that, in simulating the fund's performance over the look-back period, would reflect the way in which the fund would change its position sizes based on the fund's publicly-disclosed investment strategy.⁴⁵² The commenter explained that this alternative VaR model adjusts historical returns data by considering the ex-ante volatility of the holdings on each day in the lookback window and scaling those returns to reflect the target volatility of the fund. The commenter acknowledged that this VaR model modification would not be appropriate for all funds and could be misused by funds that do not effect these strategies during high volatility

⁴⁵¹ See AQR Comment Letter I.

⁴⁵² The commenter also suggested a modification to the absolute VaR test designed to address concerns for volatility-targeting funds as discussed at *supra* footnote 414 and accompanying text.

market conditions, but suggested the Commission could address such concerns by providing guidance that this methodology would be limited to only those funds that have an explicit strategy of targeting a specific volatility level or range that is disclosed as a principal investment strategy.

We recognize that the VaR of a fund's current portfolio is based on past trading conditions and that this can affect volatility-targeting funds as this commenter discussed. Where these high-volatility periods are in the VaR lookback period and market volatility currently is low, VaR may limit the size of the fund's positions. We have not, however, modified the proposed rule to permit the alternative method suggested. The VaR test is designed to measure the leverage risk in a fund's portfolio. The suggested method appears to measure the risk in the fund's strategy. It also assumes that the fund effectively achieves the targeted volatility each day, which may not be the case. In addition, allowing a fund to adjust historical returns when measuring the current leverage risk in a fund's portfolio would appear to introduce "gaming" concerns that we do not believe can be fully addressed by limiting such a method to only those funds that have an explicit strategy of targeting a specific volatility level or range that is disclosed as a principal investment strategy. We have, however, incorporated a number of other modifications suggested by the commenter to other aspects of the rule that may help to address the concerns the commenter expressed.⁴⁵³

6. Implementation

a. Testing Frequency

Under the final rule, a fund must determine its compliance with the applicable VaR test at least once each business day, as proposed.⁴⁵⁴ Although we believe that funds will calculate their VaRs at a consistent time each day, which would generally be either in the mornings before markets open or in the evenings after markets close, the rule does not require one at the exclusion of the other.

⁴⁵³ See, e.g., *supra* sections II.D.2.c, II.D.3, II.D.4 (discussing raising VaR limits and confidence level re-scaling).

⁴⁵⁴ Rule 18f-4(c)(2)(ii).

The Commission proposed a daily testing frequency because, if this testing requirement were less frequent, a fund could satisfy the condition only on business days requiring a VaR test and modify its trading strategy to circumvent the purpose of the test on other business days. Testing each business day also reflects the potential for market risk factors associated with a fund's investments to change quickly. The Commission received one comment on this aspect of the rule, which supported it, and we are adopting it as proposed.⁴⁵⁵

b. Remediation

If a fund determines that it is not in compliance with the applicable VaR test, then under the rule a fund must come back into compliance promptly after such determination, in a manner that is in the best interests of the fund and its shareholders.⁴⁵⁶ If the fund is not in compliance within five business days:

- The derivatives risk manager must provide a written report to the fund's board of directors and explain how and by when (*i.e.*, the number of business days) the derivatives risk manager reasonably expects that the fund will come back into compliance;⁴⁵⁷
- The derivatives risk manager must analyze the circumstances that caused the fund to be out of compliance for more than five business days and update any program elements as appropriate to address those circumstances;⁴⁵⁸ and
- The derivatives risk manager must provide a written report within thirty calendar days of the exceedance to the fund's board of directors explaining how the fund came back into compliance and the results of the derivatives risk manager's analysis of the circumstances that caused the fund to be out of compliance for more than five business days and any updates to the program elements.⁴⁵⁹

⁴⁵⁵ See J.P. Morgan Comment Letter.

⁴⁵⁶ See rule 18f-4(c)(2)(ii).

⁴⁵⁷ The final rule clarifies that this report must be in writing. See rule 18f-4(c)(2)(iii)(A); proposed rule 18f-4(c)(2)(iii)(A). The Commission did not receive comment on whether this reporting requirement must be in writing.

⁴⁵⁸ See rule 18f-4(c)(2)(iii)(B).

⁴⁵⁹ See rule 18f-4(c)(2)(iii)(C).

If the fund remains out of compliance with the applicable VaR test at that time, the derivatives risk manager's written report must update the report explaining how and by when he or she reasonably expects the fund will come back into compliance, and the derivatives risk manager must update the board of directors on the fund's progress in coming back into compliance at regularly scheduled intervals at a frequency determined by the board.⁴⁶⁰

The proposed rule would have required the derivatives risk manager to satisfy the additional reporting and analysis requirements if the fund was out of compliance for three consecutive business days.⁴⁶¹ Additionally, the proposed rule would have prohibited a fund from entering into any derivatives transactions (other than derivatives transactions that, individually or in the aggregate, are designed to reduce the fund's VaR) until the fund has been back in compliance with the applicable VaR test for three consecutive business days (the "proposed derivatives entry restriction"), among other requirements.⁴⁶² The Commission requested comment in the Proposing Release on whether the remediation provision would exacerbate fund or market instability and harm investors.⁴⁶³ The Commission also requested comment on whether there was a more-effective means for the remediation provision to balance investor protection concerns regarding compliance with the VaR-based limit on fund leverage risk and not forcing asset sales or unwinding transactions.

Many commenters urged the Commission to extend the remediation period from three business days to five business days or seven calendar days.⁴⁶⁴ These commenters suggested that the proposed three business days is too short to ensure an orderly process of getting back into

⁴⁶⁰ See *id.*; see also *infra* section II.G.2 (discussing the requirement to submit a confidential report to the Commission if the fund is out of compliance with the applicable VaR test for five business days).

⁴⁶¹ See proposed rule 18f-4(c)(2)(iii).

⁴⁶² See proposed rule 18f-4(c)(2)(iii)(A) through (C).

⁴⁶³ See Proposing Release, *supra* footnote 1, at section II.D.5.b.

⁴⁶⁴ See, e.g., AQR Comment Letter I; Capital Group Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Franklin Comment Letter; Putnam Comment Letter; SIFMA AMG Comment Letter; see also ISDA Comment Letter (suggesting seven business days); Dechert Comment Letter III (suggesting ten business days in light of concerns relating to funds fire selling assets to avoid VaR test compliance issues that may trigger reporting requirements to the Commission).

compliance.⁴⁶⁵ In particular, commenters raised concerns that during periods of high market volatility and dislocation, funds would engage in sales and other actions to get back into compliance with the VaR test that may have adverse effects on a fund and its shareholders.⁴⁶⁶ Moreover, some commenters pointed out that a five-business-day remediation period would align better with respect to over-the-counter derivatives contracts' termination provisions that, based on industry market practices, are often set at seven calendar days.⁴⁶⁷

Commenters similarly urged that the Commission eliminate or modify the proposed derivatives entry restriction.⁴⁶⁸ Commenters urged that this restriction could be disruptive to a fund's execution of its strategy and could adversely affect a fund and its shareholders.⁴⁶⁹ Several commenters urged that it should be eliminated because the other provisions requiring reporting to the fund's board of directors and to the Commission under the rule provide sufficient incentives for funds to come back into compliance promptly with the rule's VaR test.⁴⁷⁰ A few commenters also expressed concerns with the proposed derivatives entry restriction because of the challenges with predicting whether a new derivatives transaction will be VaR reducing.⁴⁷¹

After considering comments, we are making several modifications from the proposal. We are extending from three business days to five business days the time period during which a fund may be out of compliance with its VaR test without being required to report to the fund's board

⁴⁶⁵ See, e.g., Franklin Comment Letter; Putnam Comment Letter; T. Rowe Price Comment Letter.

⁴⁶⁶ See, e.g., AQR Comment Letter I; Capital Group Comment Letter; ICI Comment Letter.

⁴⁶⁷ See, e.g., Dechert Comment Letter I; ICI Comment Letter; MFA Comment Letter.

⁴⁶⁸ See, e.g., AQR Comment Letter I; Capital Group Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Franklin Comment Letter; Putnam Comment Letter; SIFMA AMG Comment Letter; Dechert Comment Letter III.

⁴⁶⁹ See, e.g., AQR Comment Letter I; Franklin Comment Letter; ISDA Comment Letter.

⁴⁷⁰ See, e.g., SIFMA AMG Comment Letter; Nuveen Comment Letter; Putnam Comment Letter. *But see* CFA Comment Letter (stating that the proposed remediation provisions did not have enough incentives for funds to comply with the rule's VaR-based test).

⁴⁷¹ See, e.g., Franklin Comment Letter; Dechert Comment Letter I; ICI Comment Letter (suggesting that the implication is that a fund must engage in pre-trade monitoring). *But see* J.P. Morgan Comment Letter (suggesting pre-trade documentation by the portfolio management team of the intended impact of the derivatives transaction should satisfy this proposed requirement).

and confidentially to the Commission.⁴⁷² We appreciate that investigating a VaR breach and taking steps to remediate it may take more time than reducing a fund's outstanding bank borrowings, which was the basis for the three-day period at proposal.

We also are modifying the rule to provide that a fund out of compliance with its VaR test must reduce its VaR promptly, in a manner that is in the best interests of the fund and its shareholders, which may exceed this five-business day period. Although a fund remaining out of compliance with the applicable VaR test raises investor protection concerns related to fund leverage risk, if the rule were to force a fund to exit derivatives transactions immediately or at the end of the five-day period, this could result in greater harm to investors. For example, it could require the fund to realize trading losses that could have been avoided under a more-flexible approach. Requiring the fund to come back into compliance promptly, in a manner that is in the best interests of the fund and its shareholders, is designed to require a fund to reduce its VaR promptly but without requiring the fund to engage in deeply discounted transactions (sometimes known as "fire sales") or otherwise incur trading losses that reasonably might be avoided while coming back into compliance in a deliberate manner that is in the best interests of the fund and its shareholders.⁴⁷³

If a fund does not come back into compliance within five business days, the remediation provision requires the fund to satisfy three additional requirements. First, the derivatives risk manager must provide a written report to the fund's board of directors and explain how and by when (*i.e.*, the number of business days) the derivatives risk manager reasonably expects that the fund will come back into compliance.⁴⁷⁴ A few commenters expressed general support for this remediation provision because it incentivizes funds to stay in compliance or come back into compliance with the applicable VaR limit.⁴⁷⁵ However, one commenter suggested eliminating

⁴⁷² Under the rule, a fund that is not in compliance within five business days also will be required to file a report to the Commission on Form N-RN. *See* rule 18f-4(c)(7); *infra* section II.H.2.

⁴⁷³ *Cf.* Dechert Comment Letter III (suggesting that the final rule require a fund to reduce risk in the best interest of investors and in line with an adviser's fiduciary responsibilities).

⁴⁷⁴ Rule 18f-4(c)(2)(iii)(A).

⁴⁷⁵ *See, e.g.*, T. Rowe Price Comment Letter; AQR Comment Letter I.

the proposed board reporting prong of the remediation provision and replacing it with a rule requiring funds out of compliance with the VaR-based test to “reduce risk in the best interest of investors and in line with an adviser’s fiduciary responsibilities.”⁴⁷⁶

After considering the comments received, we are adopting this requirement as proposed other than the change from three to five business days discussed above and a modification to require that the board report be in writing. This requirement is designed to facilitate the fund coming back into compliance promptly by requiring the derivatives risk manager to develop a specific remediation course of action and to facilitate the board’s oversight by requiring the derivatives risk manager to report this information to the board.

Second, the derivatives risk manager must analyze the circumstances that caused the fund to be out of compliance for more than five business days and update any program elements as appropriate to address those circumstances.⁴⁷⁷ Commenters did not address this aspect of the remediation provision. We are adopting this provision as proposed, other than a conforming change from three to five business days discussed above. This provision is designed to address any deficiencies in the fund’s program, which the fund’s inability to come back into compliance with the applicable VaR test within five business days may suggest exist.

Third, the derivatives risk manager, in a change from the proposal, must provide a written report within thirty calendar days of the exceedance (*i.e.*, thirty calendar days of the fund’s determination that it is out of compliance with its applicable VaR test) to the fund’s board of directors explaining: (1) how the fund came back into compliance; (2) the results of the derivatives risk manager’s analysis of the circumstances that caused the fund to be out of compliance for more than five business days; and (3) any updates to the program elements. Under the rule, if the fund remains out of compliance with the applicable VaR test at that time, the derivatives risk manager’s written report must update the report that explained how and by when he or she reasonably expects the fund will come back into compliance, and the derivatives

⁴⁷⁶ See, *e.g.*, Dechert Comment Letter III.

⁴⁷⁷ Proposed rule 18f-4(c)(2)(iii)(B).

risk manager must update the board of directors on the fund's progress in coming back into compliance at regularly scheduled intervals at a frequency determined by the board.

In the proposal, the Commission requested comment on whether the remediation provision should include any changes that would distinguish funds that have more frequent or longer periods of non-compliance with the VaR test from other funds and potentially subject them to additional remediation provisions.⁴⁷⁸ A few commenters addressed this concern.⁴⁷⁹ For example, one commenter stated that because of the proposed reporting requirements to the Commission and the fund's board of directors, any fund that has more frequent or longer periods of non-compliance would "immediately stand apart as an outlier" and the fund's board and the Commission staff could address it.⁴⁸⁰ Another commenter stated that it would be unlikely a fund would intentionally exceed the VaR limits for a specific period because of the burdens and "potentially costly and embarrassing consequences" of exceeding the VaR limit beyond the remediation period.⁴⁸¹ A commenter also stated that in lieu of the proposed restriction that may address this concern, the Commission "has many other tools" that can address these types of funds including requiring reporting to the fund's board of directors.⁴⁸²

After considering the comments received, we are adopting this new written reporting requirement. This provision is designed to facilitate appropriate board engagement and oversight when a fund is out of compliance with its VaR test. The rule provides for this follow-up within thirty calendar days because we anticipate that funds generally would have mitigated VaR breaches by that time and would be in a position to report to the board regarding the process.

For funds that are out of compliance beyond that time period, by requiring the derivatives risk manager to update the initial board report, the rule is designed to facilitate appropriate board oversight and incentivize compliance with the rule's VaR-based fund leverage risk limit. For the

⁴⁷⁸ See Proposing Release, *supra* footnote 1, at section II.D.5.b.

⁴⁷⁹ See, e.g., MFA Comment Letter; ISDA Comment Letter; AQR Comment Letter I.

⁴⁸⁰ See AQR Comment Letter I.

⁴⁸¹ See ISDA Comment Letter; *but see* CFA Comment Letter.

⁴⁸² See MFA Comment Letter.

same reasons, the rule requires the fund's board of directors to determine regularly scheduled intervals to meet with the derivatives risk manager until the fund has come back into compliance with its VaR-based test. If a fund is repeatedly out of compliance with its applicable VaR test for more than five business days, we would expect the fund and its board of directors to reconsider whether the fund's derivatives risk management program is appropriately designed and operating effectively.

Finally, we are eliminating the proposed restrictions on a fund's ability to enter into derivatives transactions while out of compliance with the VaR test. We appreciate the concerns commenters raised about the negative effects this could have on a fund's ability to pursue its strategy, to the potential detriment of shareholders. We also believe that the requirement that the fund report to the fund's board and the Commission when a fund's VaR exceeds the limits in its VaR test for five business days, as well as the other aspects of the remediation provisions, will create a strong incentive for funds to come back into compliance without the need for the final rule to limit a fund's investment activities in ways that could be detrimental to shareholders. We do not believe that additional mandatory Commission reporting is necessary because Commission staff can determine whether and how to follow up with a fund after receiving an initial report on Form N-RN. The fund also must report confidentially to the Commission on Form N-RN once it comes back into compliance. This allows the Commission to monitor the length of time that a fund has been out of compliance and the fund's progress in coming back into compliance. We expect that this monitoring would include staff outreach to a fund concerning its remediation plans where the fund has remained out of compliance for a longer period of time.

Many commenters supported the Form N-RN reporting requirement as an appropriate adjunct to the rule's remediation provision, facilitating regulatory monitoring by the Commission.⁴⁸³ One commenter, however, suggested removing the Form N-RN reporting

⁴⁸³ See, e.g., J.P. Morgan Comment Letter; Dechert Comment Letter I; ICI Comment Letter; Invesco Comment Letter; SIFMA AMG Comment Letter; Nuveen Comment Letter. *But see* ISDA

requirement due to fund sensitivities regarding having to immediately report to the Commission.⁴⁸⁴ This commenter expressed concern that to avoid this reporting requirement a fund may engage in “fire sales” during stressed market conditions that may contribute to additional systemic risk from portfolio managers selling into a volatile market and realizing losses during a period where transaction costs may be higher.

After considering comments, the final rule, consistent with the proposal, will require a fund that is not in compliance with the applicable VaR test within five business days after determining it is out of compliance to report this to the Commission on Form N-RN.⁴⁸⁵ We believe this requirement is important for facilitating appropriate regulatory oversight of fund leverage risk and compliance with the rule. This requirement is designed to provide the Commission with current information regarding potential increased risks and stress events (as opposed to delayed reporting on Form N-PORT), as discussed in more detail below.⁴⁸⁶ We have modified the rule expressly to require a fund that is promptly coming back into compliance with the applicable VaR test to do so in a manner that is in the best interests of the fund and its shareholders. A fund engaging in “fire sales” to avoid filing a report on Form N-RN would violate the final rule.

E. Limited Derivatives Users

Consistent with the proposal, rule 18f-4 includes an exception from the rule’s requirements to adopt a derivatives risk management program, comply with the VaR-based limit on fund leverage risk, and comply with the related board oversight and reporting provisions for

Comment Letter (suggesting that the board reporting requirement under the proposed remediation provision is sufficient and SEC reporting on Form N-RN is not necessary).

⁴⁸⁴ See Dechert Comment Letter III (suggesting that some of the proposed Form N-RN reporting information could be required on Form N-PORT, which would provide this information to the Commission on a more time delayed basis). Although this commenter stated that it “would eliminate the SEC reporting requirement on Form N-RN and the board reporting requirement immediately post a [VaR] limit breach,” the commenter’s concern appeared focused on filing Form N-RN because the commenter later observed in its letter that “[i]t is the immediate SEC posting [on Form N-RN], not the [b]oard reporting requirement, which creates the sense of urgency and may cause forced selling not in the best interest of the fund.”

⁴⁸⁵ See *infra* section II.G.2 (discussing Form N-RN disclosure reporting requirements).

⁴⁸⁶ *Id.*

funds that use derivatives in a limited manner (collectively, the “VaR and program requirements”).⁴⁸⁷ Requiring funds that use derivatives only in a limited way to comply with these requirements could potentially require funds (and therefore their shareholders) to incur costs and bear compliance burdens that may be disproportionate to the resulting benefits.⁴⁸⁸ We recognize that the risks and potential effect of derivatives transactions on a fund’s portfolio generally increase as the fund’s level of derivatives usage increases and when a fund uses derivatives for speculative purposes. The rule’s limited derivatives user exception is designed to provide an objective standard to identify funds that use derivatives in a limited manner.

Commenters supported the proposed limited derivatives user exception, and we are adopting it with certain modifications in response to comments.⁴⁸⁹ Under the final rule, the exception will be available to a fund that limits its derivatives exposure to 10% of its net assets. A fund may exclude from the 10% threshold derivatives transactions that are used to hedge certain currency and/or interest rate risks and positions closed out with the same counterparty.⁴⁹⁰ A fund that relies on the exception will be required to adopt policies and procedures that are reasonably designed to manage its derivatives risks.⁴⁹¹ The rule also contains remediation provisions to address instances in which a fund exceeds the 10% threshold.⁴⁹² We discuss each element of the exception below.

⁴⁸⁷ One commenter observed that if a limited derivatives user is exempt from the rule’s requirements to establish a derivatives risk management program and comply with the VaR-based limit on fund leverage risk, it seems implicit that the fund also would be exempt from the related board oversight and reporting requirements that are only relevant to funds that are required to establish a derivatives risk management program. *See* NYC Bar Comment Letter. The final rule clarifies this point by expressly providing that a limited derivatives user is not subject to the related board oversight and reporting requirements in rule 18f-4. *See* rule 18f-4(c)(4)(i).

⁴⁸⁸ The cost burden concern extends to smaller funds as well, which could experience an even more disproportionate cost than larger funds.

⁴⁸⁹ *See, e.g.,* ICI Comment Letter; Comment Letter of Gateway Investment Advisers, LLC (Mar. 24, 2020) (“Gateway Comment Letter”); SIFMA AMG Comment Letter; Comment Letter of TPG Specialty Lending (Apr. 2, 2020) (“TPG Comment Letter”); T. Rowe Price Comment Letter.

⁴⁹⁰ *See* rule 18f-4(c)(4).

⁴⁹¹ *See* rule 18f-4(c)(4)(i).

⁴⁹² *See* rule 18f-4(c)(4)(ii).

1. Derivatives Exposure

The final rule defines the term “derivatives exposure” to mean the sum of: (1) the gross notional amounts of a fund’s derivatives transactions such as futures, swaps, and options; and (2) in the case of short sale borrowings, the value of any asset sold short.⁴⁹³ We are adopting this aspect of the rule as proposed, except with a modification clarifying that derivatives instruments that do not involve future payment obligations—and therefore are not a “derivatives transaction” under the rule—are not included in a fund’s derivatives exposure.⁴⁹⁴ Further, although commenters seemed to assume that derivatives exposure was to be calculated on a gross basis in the proposed rule, the final rule expressly requires derivatives exposure to be based on “gross” notional amounts.⁴⁹⁵ This is designed to make clear that a fund’s derivatives exposure must include the sum of the absolute values of the notional amounts of the fund’s derivatives transactions, rather than a figure based on calculations that net long and short positions. In addition, because the final rule permits a fund to treat reverse repurchase agreements or similar financing transactions as derivatives transactions under certain circumstances, a fund treating these transactions as derivatives transactions also must include in its derivatives exposure the proceeds that the fund received but has not yet repaid or returned, or for which the associated liability has not been extinguished, in connection with each such transaction.⁴⁹⁶ The derivatives exposure definition is designed to provide a measure of the market exposure associated with a limited derivative user’s derivatives transactions.

Using gross notional amounts to measure market exposure could be viewed as a relatively blunt measurement, as discussed in the Proposing Release.⁴⁹⁷ The derivatives exposure threshold in the limited derivatives user exception, however, is not designed to provide a precise measure of a fund’s market exposure or to serve as a risk measure. Rather it is designed to serve

⁴⁹³ See rule 18f-4(a).

⁴⁹⁴ See rule 18f-4(a).

⁴⁹⁵ *Id.*

⁴⁹⁶ See rule 18f-4(a); see also rule 18f-4(d)(1)(ii); Item B.9.e of Form N-PORT.

⁴⁹⁷ See Proposing Release *supra* footnote 1, at 149.

as an efficient way to identify funds that use derivatives in a limited way. Commenters supported permitting the inclusion of an exception from the VaR and program requirements for funds that engage in derivatives transactions to a limited extent, based on a fund's derivatives exposure.⁴⁹⁸

a. Adjustments for Interest Rate Derivatives and Options

Like the proposed rule, the final rule permits funds to make two adjustments designed to address certain limitations associated with notional measures of market exposure. The commenters who addressed these adjustments supported them.⁴⁹⁹ Specifically, the first adjustment permits a fund to convert the notional amount of interest rate derivatives to 10-year bond equivalents, and the second adjustment permits a fund to delta adjust the notional amounts of options contracts.⁵⁰⁰ Converting interest rate derivatives to 10-year bond equivalents will provide for greater comparability of the notional amounts of different interest rate derivatives that provide similar exposure to changes in interest rates but that have different unadjusted notional amounts. Absent this adjustment, short-term interest rate derivatives in particular can produce large unadjusted notional amounts that may not correspond to large exposures to interest rate changes. Permitting funds to convert these and other interest rate derivatives to 10-year bond equivalents is designed to result in adjusted notional amounts that better represent a fund's exposure to interest rate changes. Similarly, permitting delta adjusting of options is designed to provide for a more tailored notional amount that better reflects the exposure that an option creates to the underlying reference asset. Further, providing these adjustments also would be efficient for some funds because the adjustments are consistent with the reporting requirements in Form PF and Form ADV.⁵⁰¹

⁴⁹⁸ See, e.g., Comment Letter of the Options Clearing Corporation (Apr. 15, 2020) ("OCC Comment Letter"); T. Rowe Price Comment Letter.

⁴⁹⁹ See OCC Comment Letter (stating that "allowing a fund to delta-adjust the notional amount of a listed options contract allows the fund to get a more accurate picture of its exposure to the underlying security or index"); see also ISDA Comment Letter.

⁵⁰⁰ Delta refers to the ratio of change in the value of an option to the change in value of the asset into which the option is convertible. A fund would delta adjust an option by multiplying the option's unadjusted notional amount by the option's delta.

⁵⁰¹ See, e.g., General Instruction 15 to Form PF; Item B.30 of Section 2b of Form PF; Glossary of Terms, Gross Notional Value of Form ADV; Schedule D of Part 1A of Form ADV.

b. Closed-Out Derivatives Positions

Several commenters stated that the rule should allow for netting of offsetting derivatives transactions when calculating a fund's derivatives exposure.⁵⁰² They asserted that permitting a fund to calculate its derivatives exposure by netting offsetting derivatives positions is necessary to more accurately identify the fund's market exposure through derivatives.⁵⁰³ Commenters stated that a derivatives transaction previously executed by a fund is often exited through the fund's execution of an identical but offsetting transaction and that this process is a useful tool in controlling a fund's derivatives exposure.⁵⁰⁴ Some commenters favored incorporating a broad use of netting, for instance, allowing netting of offsetting derivatives holdings with different counterparties.⁵⁰⁵ Other commenters suggested that the rule should allow for netting only for offsetting transactions with the same counterparty.⁵⁰⁶

We recognize that, in certain circumstances, funds seeking to exit a derivatives position may enter into a directly offsetting position to eliminate the fund's market exposure. Accordingly, we are modifying the proposed "derivatives exposure" definition in the final rule to allow a fund to exclude from its derivatives exposure any closed-out positions. These positions must be closed out with the same counterparty and must result in no credit or market exposure to the fund.⁵⁰⁷

The final rule does not, however, permit a fund to exclude offset positions across different counterparties. This could result in the fund having a large volume of open derivatives positions subject to their own margin and other requirements with various counterparties. For

⁵⁰² See, e.g., Angel Oak Comment Letter; Dechert Comment Letter I; Guggenheim Comment Letter; T. Rowe Price Comment Letter.

⁵⁰³ See, e.g., Guggenheim Comment Letter; ICI Comment Letter; Invesco Comment Letter; ISDA Comment Letter; Angel Oak Comment Letter; Dechert Comment Letter I.

⁵⁰⁴ See, e.g., T. Rowe Price Comment Letter; Invesco Comment Letter; Guggenheim Comment Letter.

⁵⁰⁵ See, e.g., ICI Comment Letter; Invesco Comment Letter.

⁵⁰⁶ Guggenheim Comment Letter; SIFMA AMG Comment Letter.

⁵⁰⁷ Rule 18f-4(a). In addition, the final rule's approach to offsetting positions is consistent with the way advisers report derivatives exposures on Form PF, which may provide some efficiencies where these advisers also manage funds that are limited derivatives users.

example, when a fund must make margin or collateral payments on a derivatives transaction to one counterparty, and has not yet received payments from an offsetting transaction from a different counterparty, the fund might have to sell investments to raise cash for these purposes. This could result from differences in the timing of required payments, effects of margin thresholds or minimum transfer amounts for the exchange of margin or collateral, or other reasons. These transactions could involve a scale of derivatives positions and related operational and counterparty risks that we believe should be managed as part of a fund's derivatives risk management program.

2. Limited Derivatives User Threshold

A fund will qualify as a limited derivatives user under the rule if its derivatives exposure does not exceed 10% of its net assets. As discussed in more detail above, a fund's derivatives exposure is based primarily on the gross notional amounts of a fund's derivatives transactions such as futures, swaps, and options, subject to certain adjustments. In addition, and in a change from the proposal, the final rule permits a fund to exclude certain currency and interest rate hedges from the 10% threshold. This threshold is designed to provide an objective standard to identify funds that use derivatives in a limited manner.

a. 10% Derivatives Exposure Threshold

The Commission proposed a 10% derivatives exposure threshold based in part on staff analysis of funds' practices regarding derivatives use based on Form N-PORT filings. Specifically, DERA staff's analysis in connection with the proposal showed that 78% of funds had adjusted notional amounts below 10% of NAV; 80% of funds had adjusted notional amounts below 15% of NAV; 81% of funds had adjusted notional amounts below 20% of NAV; and 82% of funds had adjusted notional amounts below 25% of NAV.⁵⁰⁸ One commenter conducted a survey of funds' derivatives exposure and found similar results.⁵⁰⁹ Although BDCs are not

⁵⁰⁸ See Proposing Release *supra* footnote 1, at 151 (citing data based on Form N-PORT filings from September 2019). These figures, as well as the updated figures provided below, include funds that did not report any derivatives transactions.

⁵⁰⁹ See ICI Comment Letter (asserting that "75 percent of respondents (3,940 out of 5,228 funds) indicated that, as of December 31, 2019, they would have qualified as limited derivative users").

required to file reports on Form N-PORT, our staff separately analyzed a sampling of 48 BDCs and found that of the sampled BDCs, 54% did not report any derivatives holdings and a further 29% reported using derivatives with gross notional amounts below 10% of net assets.⁵¹⁰ Commenters did not provide alternative data regarding the extent to which BDCs use derivatives in the context of the limited derivatives user exception.

The 10% threshold the Commission proposed took these findings into account, including the Commission's observation that setting the threshold at 10%, 15%, 20%, or 25%, for example, seemed likely to result in nearly the same percentages of funds qualifying for the exception. Since the proposal, DERA staff updated their analysis of funds' use of derivatives based on September 2020 Form N-PORT filings. The results of the updated analysis are similar to the findings at proposal, with the updated analysis reflecting that 79% of funds had adjusted notional amounts below 10% of NAV; 81% of funds had adjusted notional amounts below 15% of NAV; 82% of funds had adjusted notional amounts below 20% of NAV; and 83% of funds had adjusted notional amounts below 25% of NAV. Similarly, our staff updated their analysis of the use of derivatives by BDCs. Of the 48 BDCs sampled at proposal (or their successor funds), updated data reflects that 59.1% did not report any derivatives holdings, and a further 31.8% reported using derivatives with gross notional amounts below 10% of net assets. Four of the BDCs sampled used derivatives more extensively, when measured on a gross notional basis, mainly due to their use of currency forwards and/or interest rate swaps. However, as proposed, the final rule permits a fund to convert the notional amount of interest rate derivatives to 10-year bond equivalents.⁵¹¹ Further, as discussed in more detail below, and in a change from the proposal, a fund may exclude currency and interest rate derivatives from the 10% derivatives exposure threshold if these transactions meet certain criteria for hedging under the final rule. Most commenters generally supported the limited derivatives user exception but did not comment

⁵¹⁰ See Proposing Release *supra* footnote 1, at 151-52.

⁵¹¹ See rule 18f-4(a); see also *supra* section II.E.1.a. Our staff did not have access to sufficient information to adjust the notional amounts of the BDCs' interest rate derivatives.

specifically on the proposed 10% threshold. One commenter, however, suggested that a fund with derivatives exposure up to 20% or 25% of net assets should be permitted to rely on this exception absent data indicating harm would result from a higher threshold.⁵¹² This commenter stated that distressed or volatile market conditions could make it difficult for funds to consistently maintain a derivatives exposure of less than 10%.

We are adopting the proposed 10% derivatives exposure threshold rather than a higher figure, like 25%, because we believe the 10% exposure level is likely to result in nearly the same percentage of funds qualifying for the exception based on current practices. The 10% threshold will provide greater investor protections than a 25% threshold, for example, without a materially greater compliance burden on funds, since only 4% more funds would be subject to the derivatives risk management program at the 25% threshold. Further, we believe that a fund that maintains derivatives exposure at 10% or below is using derivatives in a limited manner, whereas a fund that has derivatives exposure near 20% or 25% of its net assets is more likely to present risks that we believe should be managed as part of a derivatives risk management program. For instance, we believe that it is important that a fund with derivatives exposure near 20% or 25% is subject to the periodic stress testing requirement of the derivatives risk management program.⁵¹³ For example, although the final rule permits a fund to delta adjust options because we believe this provides for a more tailored notional amount, delta-adjusting options also creates the risk that the size of a fund's investment exposure can increase quickly as market conditions change, including in times of stress. The final rule's stress testing requirement will result in the fund manager developing a more complete understanding of the fund's potential losses during distressed or volatile market conditions, such as those related to the recent COVID-19 global health pandemic.

⁵¹² See ISDA Comment Letter.

⁵¹³ See *infra* section II.B.2.c (discussing the stress testing requirements of the derivatives risk management program).

b. The 10% Derivatives Exposure Threshold Excludes Certain Hedging Transactions

In a modification of the proposal, the final rule allows a fund to exclude certain hedging transactions from the 10% derivatives exposure threshold. The proposed rule, in contrast, included two mutually-exclusive bases for relying on the limited derivatives user exception. The first prong of the proposed exception would have excluded funds when their derivatives exposure is less than 10% of net assets. The second prong would have excluded funds that limited their derivatives use solely to certain currency hedging transactions. The Commission observed that using currency derivatives solely to hedge currency risk does not raise the policy concerns underlying section 18.

Commenters urged the Commission to combine the proposed exposure-based and currency hedging exceptions by allowing a fund to exclude currency hedges from the derivatives exposure calculation.⁵¹⁴ Commenters stated that requiring a limited derivatives user to choose between these exceptions could require funds that use derivatives in a limited way nevertheless to incur the costs and compliance burdens of complying with the VaR and program requirements.⁵¹⁵ For example, several commenters were concerned that, under the proposal, a fund with currency derivatives exposure exceeding 10% of the fund's net assets would be unable to use a single derivative for any other purpose while remaining a limited derivatives user.⁵¹⁶ The fund would have to either leave its foreign-currency denominated investments unhedged or, if it hedged its currency risk, forgo even a limited use of non-currency hedging derivatives.⁵¹⁷ Commenters also stated that, because they believed that currency hedging derivatives permitted in the proposed exception do not raise section 18 policy concerns, excluding currency hedging

⁵¹⁴ See, e.g., ICI Comment Letter; Dechert Comment Letter I; TPG Comment Letter.

⁵¹⁵ See, e.g., ICI Comment Letter; Calamos Comment Letter.

⁵¹⁶ See, e.g., ICI Comment Letter; T. Rowe Price Comment Letter; TPG Comment Letter.

⁵¹⁷ Dechert Comment Letter I; ICI Comment Letter (stating that this "is inefficient and likely detrimental to a fund's returns and could create more risk for the fund").

derivatives from the 10% derivatives exposure threshold would not raise additional risks that need to be managed under a derivatives risk management program.⁵¹⁸

Several commenters also suggested broadening the scope of the exclusion to include interest rate hedging that corresponds directly to a specific cash-market instrument held by the fund.⁵¹⁹ Some commenters stated that they routinely enter into fixed-to-floating interest rate swaps (or vice versa) and that these transactions are matched to the notional amount and maturity of a specific security in the fund's portfolio.⁵²⁰ These commenters asserted that such matched interest rate hedging is conceptually the same as the currency hedging that the proposed exception would permit because the transactions are easily identified as a hedge, offset a single risk (interest rate risk), and are tied to a specific instrument in a fund's portfolio.⁵²¹

After considering comments, we are permitting funds to exclude certain currency and interest rate hedges from the 10% derivatives exposure threshold, in the final rule.⁵²² While distinguishing most hedging transactions from leveraged or speculative derivatives transactions is challenging, the rule limits this exclusion to interest rate or currency hedging transactions directly matched to particular investments held by the fund, or the principal amount of borrowings by the fund. We believe these currency and interest rate derivatives are appropriate for limited derivatives users because they will predictably and mechanically provide the anticipated hedging exposure without giving rise to basis risks or other potentially complex risks that should be managed as part of a derivatives risk management program.

Accordingly, under the final rule a fund may exclude currency and interest rate derivatives used to hedge the respective currency and interest rate risks associated with specific equity or fixed-income investments held by the fund or borrowings by the fund. In the case of currency hedges, the equity or fixed-income investments being hedged must be foreign-currency-

⁵¹⁸ See, e.g., Vanguard Comment Letter; ICI Comment Letter.

⁵¹⁹ See, e.g., SIFMA AMG Comment Letter; ISDA Comment Letter.

⁵²⁰ See, e.g., SIFMA AMG Comment Letter; TPG Comment Letter.

⁵²¹ See, e.g., Guggenheim Comment Letter; TPG Comment Letter.

⁵²² See rule 18f-4(c)(4)(i)(B).

denominated. These derivatives must be entered into and maintained by the fund for hedging purposes. The notional amounts of such derivatives may not exceed the value of the hedged instruments (or the par value thereof, in the case of fixed-income investments, or the principal amount, in the case of borrowings) by more than 10%. These requirements are substantially similar to the proposal's currency hedging exception, except the proposal provided that the derivative's notional amount could not exceed the value of the hedged investment by more than a "negligible amount" instead of 10%.⁵²³

Several commenters urged that we replace a "negligible amount" with a fixed numerical value to provide greater clarity and facilitate compliance.⁵²⁴ Many commenters suggested that a 10% numerical value would be consistent with the limited derivatives user exception's 10% derivatives exposure threshold.⁵²⁵ Commenters stated that there are situations, such as shareholder redemptions or fluctuations in the market value of a hedged investment, that can temporarily cause the notional amounts of the hedges to exceed the value of the hedged investments by more than a negligible amount.⁵²⁶

After considering these comments, we have modified the proposal to replace "negligible amount" with a 10% threshold in the final rule. We are not taking the position that this threshold reflects a negligible amount. Rather, this change is designed to provide an unambiguous numerical value to facilitate compliance. Setting the level at 10%, as opposed to a lower value like 5% or 3%, also will avoid funds frequently trading (and incurring the attendant costs) to resize their hedges in response to small changes in value of the hedged investments. If the notional amount of a derivatives transaction exceeds the value of the hedged investments by more than 10%, however, it will no longer qualify as a hedge under the limited derivatives user exception.

⁵²³ See proposed rule 18f-4(c)(3).

⁵²⁴ See, e.g., BlackRock Comment Letter; Dechert Comment Letter I.

⁵²⁵ See, e.g., BlackRock Comment Letter; ICI Comment Letter.

⁵²⁶ See Invesco Comment Letter.

One commenter urged that the final rule refer simply to foreign-currency denominated “investments,” rather than “foreign-currency-denominated equity or fixed-income investments.”⁵²⁷ The commenter stated that certain investments, such as foreign currency itself, may not constitute an equity or fixed-income investment. We have not made this modification because we understand, based on our staff’s analysis of Form N-PORT filings, that funds rarely hold foreign currency in such significant amounts, and for an extended period, that they would hedge this currency risk. Moreover, we believe that a rule that refers specifically to “equity or fixed-income investments” is appropriate because, absent this limitation, a fund could enter into derivatives transactions to hedge the risks associated with other derivatives transactions. We view using derivatives to hedge the risks of a fund’s cash-market investments, in contrast, as more consistent with “limited” derivatives use.

c. Certain Suggested Transactions Not Excluded From The 10% Derivatives Exposure Threshold

We have not further expanded the limited derivatives user exception as some commenters urged to include additional hedging or other transactions. We understand that certain other derivatives strategies could mitigate funds’ portfolio risks. The exception is not meant to provide parameters for hedging generally or to provide a comprehensive list of transactions that may pose more limited or defined risks. The final rule’s limited derivatives user exception, however, is designed to provide an objective standard to identify funds that use derivatives in a limited manner and help facilitate compliance with the rule.⁵²⁸ Unlike the currency and interest rate

⁵²⁷ Invesco Comment Letter. This commenter also asserted that, although denominated in U.S. dollars, investors in American depositary receipts (“ADRs”) are exposed to currency risk equivalent to that incurred by investing directly in the foreign security held in the ADR and that it would therefore be appropriate to “look through” the ADR to the underlying foreign security for purposes of identifying currency hedges under the rule. We agree.

⁵²⁸ The challenges of distinguishing between hedging and speculative activity have been considered in numerous regulatory and financial contexts. For example, the exemption for certain risk-mitigating hedging activities from the prohibition on proprietary trading by banking entities in the rules implementing section 13 of the Bank Holding Company Act (commonly known as the “Volcker Rule”). *See* Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds, Release No. BHCA-1 (Dec. 10, 2013) 79 FR 5536 (Jan. 31, 2014), at 5629, 5627. The complexity of distinguishing hedging from speculation in this context is notable because the exemption is designed for entities that would not otherwise be engaged in speculative activity.

hedges discussed above, other transactions commenters suggested may not always predictably and mechanically provide the anticipated hedging exposure without giving rise to basis risks or many other potentially complex risks that we believe should be managed as part of a derivatives risk management program. Moreover, if we were to permit funds to engage in some or all of these transactions, as some commenters suggested, that could result in a fund obtaining derivatives exposure up to the 10% threshold while also engaging in a range of other transactions. We do not believe this would represent a limited use of derivatives that should be exempted from the rule's derivatives risk management program and VaR requirements. We discuss commenters' specific suggestions below.

Some commenters stated that certain derivatives transactions used for hedging purposes but not directly matched to a particular instrument in the fund's portfolio should be excluded from a fund's 10% derivatives exposure threshold. For instance, a few commenters requested an exclusion for duration hedging, which is used primarily by fixed-income funds to manage their exposure to interest rate fluctuations.⁵²⁹ We are not including duration hedging and similar transactions in the rule because, in contrast to the currency and interest rate hedging permitted under the exclusion, duration hedging is not directly matched to a particular instrument in a fund's portfolio, but rather seeks to modify a portfolio's general interest rate exposure. Duration hedging can involve more complex hedging activities than the hedging transactions permitted under the final rule, which are tied to specific securities held by the fund. Duration hedging therefore can require a degree of sophistication to implement and manage.⁵³⁰ For these reasons, we believe that a fund that engages in these transactions, to a sufficient degree, should address these transactions as part of the fund's derivatives risk management program and in its compliance with the final rule's VaR requirements.

⁵²⁹ For example, if a portfolio has a duration of five (meaning that for every 1% increase in interest rates, the value of the portfolio will decline by 5%), interest rate derivatives could be used to reduce that sensitivity to a lower rate (for example, 2% or 3%). *See* Guggenheim Comment Letter; *see also* SIFMA AMG Comment Letter.

⁵³⁰ *See, e.g.,* Robert Daigler, Mark Copper, *A Futures Duration-Convexity Hedging Method*, 33 *The Financial Review* 61 (1998) (discussing the limitations and complexities of duration hedging).

Further, several commenters requested that purchased single-name credit default swaps be excluded.⁵³¹ Commenters asserted that these swaps are used to hedge a single risk factor, credit risks.⁵³² Although these derivatives transactions may be tied to a particular reference asset held by the fund, we are not excluding these transactions from a fund's 10% derivatives exposure threshold. Market value changes in the fund's investment in the reference asset may not be offset precisely by changes in value of, or payment amounts under, the credit default swap. Further, credit default swaps are typically administered and governed by procedures and documents established by the International Swaps and Derivatives Association ("ISDA"), a third party separate from the parties to the transaction. The ISDA procedures may determine whether the issuer has experienced a credit event that triggers a payment from the seller of protection. These determinations will affect whether a fund receives a payment from the protection seller in the event of a possible credit event. The specific credit events for a given credit default swap also can affect the swap's value or its payment amount and, accordingly, can introduce basis risk between the swap and an investment held by the fund. These mismatches can occur particularly if the fund holds a security issued by the entity referenced in the credit default swap but not the exact reference obligation used by the relevant ISDA procedure. A credit default swap therefore will not always predictably and mechanically provide the anticipated hedging exposure without giving rise to basis risks or other risks that, if incurred in sufficient size, should be managed as part of a derivatives risk management program.

Separately, one commenter asserted that after the initial premium, a purchased single-name credit default swap only obligates a fund to pay a regularly-scheduled coupon at a rate fixed on trade date.⁵³³ The commenter urged treating this transaction as an unfunded commitment agreement under the rule. We are not taking this approach. We believe that

⁵³¹ See, e.g., ICI Comment Letter, ISDA Comment Letter; SIFMA AMG Comment Letter.

⁵³² See, e.g., SIFMA AMG Comment Letter; *see also* Guggenheim Comment Letter.

⁵³³ See Guggenheim Comment Letter (further stating that if "the reference issuer fails during the term of the trade, an auction settlement process will unfold pursuant to which the fund will receive a cash payment equal to the difference (if greater than zero) between the par value of the reference issuer's debt and the auction-determined price of such debt").

purchased single-name credit default swaps are derivatives instruments and are distinguishable from unfunded commitment agreements. For example, they involve investment risks during the life of the transaction as the value of the swap changes as perceptions of the credit risk of the entity that the swap references change.⁵³⁴ Credit default swaps, including purchased credit default swaps, provide the ability to take unfunded positions in an issuer's credit risk with a future payment obligation that can create leverage and other risks.⁵³⁵ We therefore are not excluding purchased credit default swaps from a fund's 10% derivatives exposure threshold the final rule.

Additionally, commenters suggested that covered call options and certain purchased option spreads should be excluded from a fund's 10% derivatives exposure threshold.⁵³⁶ Commenters asserted that for these transactions, the potential future payment obligation is fully covered either by shares the fund already owns, in the case of a covered call option, or by offsetting purchased options, in the case of a purchased option spread.⁵³⁷ Although these transactions have a defined risk tied to an investment held by the fund, they may be used for speculative purposes, which makes it difficult to categorically classify these derivatives transactions as hedges. Further, we do not believe that it is appropriate or feasible for the limited derivatives user exception to identify all derivatives instruments or combinations of derivatives instruments that may mitigate a defined risk in the fund or a fund position considered in isolation. We therefore have not modified the rule as these commenters suggested.

Similarly, one commenter expressed the view that the Commission should exclude any derivatives transactions from the 10% derivatives exposure threshold if a fund earmarks liquid

⁵³⁴ See footnote 751 and accompanying text for further discussion of the differences between derivatives transactions and unfunded commitment agreements.

⁵³⁵ See, e.g., In the Matter of UBS Willow Management L.L.C. and UBS Fund Advisor L.L.C., Investment Company Act Release No. 31869 (Oct. 16, 2015) (settled action) (involving a registered closed-end fund that incurred significant losses due in part to large losses on the fund's purchased credit default swap portfolio).

⁵³⁶ See, e.g., Dechert Comment Letter I; Franklin Templeton Comment Letter; ICI Comment Letter.

⁵³⁷ See Franklin Templeton Comment Letter.

assets equal to the derivatives' full notional obligations.⁵³⁸ The commenter suggested that this approach would allow funds to engage in hedging transactions while keeping fund leverage ratios low, at 200% or below. The approach suggested by the commenter would allow a fund to engage in a potentially significant amount of derivatives transactions while remaining a limited derivatives user. Although these transactions may be “unelaborate” in some cases, as described by the commenter,⁵³⁹ these transactions could be used to leverage a fund's portfolio and could be used to introduce significant risk. We believe that funds engaging in such a level of derivatives activity should comply with the VaR and program requirements. We therefore have not modified the rule as the commenter suggested.

One commenter also requested that the exclusion include synthetic positions where a fund holds cash with a value equal to the notional amount of derivatives held by the fund, less any posted margin.⁵⁴⁰ This commenter asserted that a fund's use of synthetic derivatives should be excluded because they do not create leverage. We understand that funds may use derivatives to create synthetic positions to replicate a cash-market exposure in a given security or group of securities. However, based on Commission staff's experience, we understand that there could be events that cause these synthetic positions to behave differently than the equivalent cash-market position. For instance, an equity swap may contain a complex merger event or potential adjustment event where the consequences diverge from the desired consequences available to a cash-market investor. For example, a swap contract may terminate upon a valid tender offer for the underlying stock. A swap dealer also may terminate a transaction due to the dealer's inability to continue to hedge its market exposure under the swap or due to increased hedging costs. These kinds of events could lead to an early termination of a synthetic position prior to the desired

⁵³⁸ Keen Comment Letter.

⁵³⁹ *Id.*

⁵⁴⁰ Fidelity Comment Letter (stating that these synthetic positions are “routinely used by funds to fully invest shareholder funds where access to a particular market may be limited at any given time, or to manage large flows into a fund”).

liquidation of the related cash-market investment. Further, the ability to adjust a fund's position in such a swap may be more limited than its adjustment of cash-market investments.

Moreover, although we believe that a derivatives transaction's notional amount is an appropriate means of measuring derivatives exposure for purposes of the limited derivatives user exception, the notional amount is not a risk measure and may not appropriately reflect the derivative's market exposure in all cases, such as with respect to certain complex derivatives.⁵⁴¹ This commenter's suggestion would permit a fund to obtain substantially more derivatives exposure than permitted under the 10% threshold—with exposure theoretically up to 100% of the fund's net assets—increasing the likelihood that the fund could incur substantial derivatives risks without establishing a derivatives risk management program or complying with the rule's VaR test requirements. We do not believe this would be a sufficiently limited use of derivatives that it should not be subject to those requirements. For these reasons we are not excluding synthetic positions from the 10% derivatives exposure threshold in the exception.

One commenter suggested calculating each derivatives transaction's impact on VaR as an alternative method for identifying hedging transactions that a fund would exclude from its 10% derivatives exposure threshold. If the incremental VaR calculation is negative, the derivatives transaction reduces the fund's risk profile and should therefore be deemed to fall within the hedging-based exclusion.⁵⁴² As we discuss above, VaR can be used to analyze whether a fund is using derivatives transactions to leverage the fund's portfolio. VaR is just one risk management tool, however, and we believe that it is more effective if supplemented with other measures.⁵⁴³ This commenter's suggestion could involve funds taking on substantial derivatives exposure based on VaR calculations without complying with the other aspects of the rule, like stress testing, that are designed to complement VaR. This is because an approach based solely on VaR could identify derivatives transactions as reducing a fund's risk based on historical correlations

⁵⁴¹ See, e.g., 2015 Proposing Release, *supra* footnote 1, at n.175 and accompanying discussion.

⁵⁴² Angel Oak Comment Letter (stating that the “risk of [the] overall portfolio should be reduced after the hedging transactions are executed”).

⁵⁴³ See *supra* section II.D.1, at footnotes 297-299 and the accompanying paragraph.

that could break down, including in periods of market stress or the trading days during which the greatest losses occur (*i.e.*, the “tail risks” that VaR does not measure).

Finally, one commenter urged that we expand the limited derivatives user exception to exclude commodity hedging from a fund’s derivatives exposure.⁵⁴⁴ Funds typically do not invest directly in commodities, however, and this suggestion could, for example, involve funds hedging the exposure created from investments in commodity derivatives with other commodity derivatives. We recognize that the parties to certain commodity derivatives transactions (like commodity futures and options on those futures) may view these transactions as hedged in that they may be delta neutral.⁵⁴⁵ If these positions remain delta neutral, losses on one of the positions will be offset by gains on the other. However, these transactions continue to pose risks that may be significant. For instance, as certain factors change over time, such as the price of the underlying asset and/or the interest rate, the underlying delta can change quickly, introducing risk that will no longer be offset by the other position. Accordingly, we believe these transactions, if incurred in sufficient size, should be addressed through the rule’s derivatives risk management program and VaR test requirements.

3. Risk Management

A fund relying on the limited derivatives user exception, as proposed, will be required to manage the risks associated with its derivatives transactions by adopting and implementing written policies and procedures that are reasonably designed to manage the fund’s derivatives risks.⁵⁴⁶ The requirement that funds relying on the exception manage their derivatives risks recognizes that even a limited use of derivatives can present risks that a fund should manage.

⁵⁴⁴ See Guggenheim Comment Letter.

⁵⁴⁵ As an example, if a fund sells a put option on natural gas futures and also sells those same futures contracts, and the amount of the sold futures contracts equals the delta of the sold option, these positions will be “delta neutral.”

⁵⁴⁶ See rule 18f-4(c)(4)(i)(A). We are adopting the definition of derivatives risks as proposed, including the requirement that, in addition to the enumerated risks, a fund’s derivatives risks include any other risks a fund’s investment adviser deems material in the case of a limited derivatives user. See *supra* section II.B.2.a (discussing the derivatives risks definition).

For example, a fund that uses derivatives to hedge currency risks would not be introducing leverage risk, but could still introduce other risks, including counterparty risk and a risk of selling investments to meet margin calls. As another example, certain derivatives, and particularly derivatives with non-linear or path-dependent returns, may pose risks that require monitoring even when the derivatives' delta-adjusted notional amount represents a small portion of net asset value. In such case, because of the non-linear payout profiles associated with put and call options, changes in the value of the option's underlying reference asset can increase the option's delta, and thus a fund's derivatives exposure from the option. An options transaction that represents a small percentage of a fund's net asset value can rapidly increase to a larger percentage.

The policies and procedures that a fund relying on the limited derivatives user exception adopts should be tailored to the extent and nature of the fund's derivatives use. For example, a fund that uses derivatives only occasionally and for a limited purpose, such as to equitize cash, is likely to have limited policies and procedures commensurate with this limited use. A fund that uses more complex derivatives with derivatives exposure approaching 10% of net asset value, in contrast, should have more extensive policies and procedures.

Commenters generally supported the proposed requirement that a fund relying on the limited derivatives user exception should adopt and implement written policies and procedures reasonably designed to manage the funds' derivatives risks.⁵⁴⁷ One commenter requested that the Commission provide further guidance on the contents of these required policies and procedures.⁵⁴⁸ This commenter specifically requested additional clarity on the minimum frequency of testing for continued compliance with the exception.

The final rule is designed to require a fund relying on the limited derivatives user exception to manage all risks associated with its derivatives transactions. Moreover, this approach allows funds to scale their policies and procedures to address the different strategies

⁵⁴⁷ See, e.g., Gateway Comment Letter; Franklin Comment Letter.

⁵⁴⁸ See SIFMA AMG Comment Letter.

funds may pursue, the different level of derivatives exposure they may seek (so long as they remain below the 10% derivatives exposure threshold), and the different risks associated with their derivatives transactions. In contrast, although a more prescriptive approach regarding a fund's policies and procedures, such as a minimum frequency of testing as one commenter suggested, would provide clearer guidelines to facilitate compliance, this approach may be over- or under-inclusive considering the breadth of funds' use of derivatives and the derivatives' particular risks.

4. Exceedances of the Limited Derivatives User Exception

In the Proposing Release, the Commission stated that if a fund's derivatives exposure were to exceed the 10% threshold for any reason, the fund would have to reduce its derivatives exposure promptly or establish a derivatives risk management program and comply with the VaR-based limit on fund leverage risk as soon as reasonably practicable.⁵⁴⁹ The Commission also requested comment on whether the rule should otherwise address exceedances and remediation.

Many commenters requested further clarity on issues related to exceedances and remediation of the exception in the final rule, including to prevent confusion and divergent practices.⁵⁵⁰ As discussed in more detail below, commenters sought additional clarity and made suggestions regarding cases where a fund's derivatives exposure were to exceed the 10% threshold temporarily, as well as cases where a fund exceeded the derivatives exposure threshold and determined to come into compliance with the VaR and program requirements rather than reduce the fund's derivatives exposure.

To address commenters' concerns, we have determined to modify the final rule to address exceedances of the 10% derivatives exposure threshold. The final rule includes two alternative paths for remediation. If a fund's derivatives exposure exceeds the 10% derivatives exposure

⁵⁴⁹ See Proposing Release *supra* footnote 1, at 155.

⁵⁵⁰ See, e.g., BlackRock Comment Letter; Nuveen Comment Letter; Invesco Comment Letter; Dechert Comment Letter I; *see also* ICI Comment Letter (urging that further confusion could result without clear guidance in situations in which the Commission's exam staff questions whether a fund's remediation activities were timely).

threshold for five business days, the fund’s investment adviser must provide a written report to the fund’s board of directors informing it whether the investment adviser intends either to: (1) promptly, but within no more than thirty calendar days of the exceedance, reduce the fund’s derivatives exposure to be in compliance with the 10% threshold (“temporary exceedance”); or (2) establish a derivatives risk management program, comply with the VaR-based limit on fund leverage risk, and comply with the related board oversight and reporting requirements as soon as reasonably practicable (“derivatives risk management program adoption”).⁵⁵¹ In either case the fund’s next filing on Form N-PORT must specify the number of business days, in excess of the five-business-day period that the final rule provides for remediation, that the fund’s derivatives exposure exceeded 10% of its net assets during the applicable reporting period.⁵⁵²

The two paths that the final rule permits for remediation are designed to balance providing a clear framework for addressing exceedances that persist beyond five business days with investor protection concerns related to fund leverage risk and potential harm to a fund if it were required to sell assets or exit positions quickly to remain a limited derivatives user. We discuss each of the two paths for remediation below.

⁵⁵¹ See rule 18f-4(c)(4)(ii). A fund with derivatives exposure exceeding the 10% threshold that complies with the remediation provision and other requirements of rule 18f-4 applicable to a limited derivatives user will still qualify as a limited derivatives user. Under these circumstances the fund’s derivatives transactions therefore will not affect a fund’s computation of asset coverage, a concern that one commenter raised. See Calamos Comment Letter. This is because the final rule provides that a fund’s derivatives transactions entered into in compliance with the rule will not be considered for purposes of computing asset coverage under section 18(h). See rule 18f-4(b).

⁵⁵² See section II.G.1.a. For example, if a fund relying on the limited derivatives user exception were to determine, on the evening of Monday, June 1, that its derivatives exposure exceeded 10% of its net assets, and this exceedance were to persist through Tuesday (June 2), Wednesday (June 3), Thursday (June 4), Friday (June 5), Monday (June 8), and Tuesday (June 9), the fund would specify on its next Form N-PORT filing that it had exceeded the 10% derivatives exposure threshold for 1 day (because five business days following the determination on June 1 is June 8, and the fund is required to report the number of business days in excess of the five-business-day remediation period, therefore the fund will only report the exceedance on Tuesday, June 9). Information provided in response to this new Form N-PORT reporting item will not be made public.

a. Temporary Exceedance

Several commenters who addressed temporary exceedances urged that we provide greater clarity by including in the final rule a specific cure period for a fund to remediate a breach.⁵⁵³ A commenter also urged us to consider including an exception for temporary exceedances that result from certain “routine” fund events, such as large redemptions and fund rebalancings.⁵⁵⁴ This commenter suggested that the investment adviser would determine the appropriate duration of the fund’s exceedance based on the fund’s risk guidelines and market convention.

After considering comments, we are providing an initial five-business-day period for a fund to address any temporary exceedance of the threshold.⁵⁵⁵ We recognize that there can be circumstances that could cause a fund’s derivatives exposure temporarily to exceed the 10% threshold. These might include circumstances that are consistent with the fund generally using derivatives in a limited way, for example, a decrease in the fund’s net asset value while its derivatives’ notional amounts remain relatively constant. This could happen more frequently during periods of volatile market conditions. The five-business-day remediation period is designed to provide funds with some flexibility in coming back into compliance with the limited derivatives user exception without triggering an obligation to inform the fund’s board of directors or a Form N-PORT reporting requirement. This time period is consistent with the time period that the final rule permits for a fund to come back into compliance with the VaR test before the fund reports a breach to its board and the Commission.

This provision also provides some flexibility for a fund that cannot reduce its exposure within five business days in a manner that is in the best interests of the fund and its

⁵⁵³ See ICI Comment Letter (requesting a 14-calendar-day cure period for a temporary breach, stating that such cure period “is a sufficient and reasonable period of time for funds to unwind, close out, or terminate such transactions in order to come back into compliance with the exception”); *see also* Invesco Comment Letter (requesting a 7-calendar-day cure period); SIFMA AMG Comment Letter (requesting a 5-business-day cure period).

⁵⁵⁴ Fidelity Comment Letter.

⁵⁵⁵ See rule 18f-4(c)(4)(ii).

shareholders.⁵⁵⁶ For example, a fund with derivatives exposure that exceeds the 10% threshold because of rebalancing activities as identified by one commenter would have flexibility either to reduce derivatives exposure below 10% within five business days, or to take more time to reduce exposure (up to thirty calendar days of the fund's determination that it is out of compliance with the 10% threshold) if the adviser reports to the fund's board.⁵⁵⁷

Although this provision provides flexibility, if a fund were to exceed the 10% threshold repeatedly, and particularly if those exceedances occurred over a long period of time and did not occur in connection with extreme market events that may cause rapid and significant changes in a fund's net asset value, the fund would not appear to be using derivatives in a limited manner. In order for a fund's compliance policies and procedures under rule 38a-1 to be reasonably designed to achieve compliance with the final rule, they should be designed to prevent such repeated exceedances. The fund's policies and procedures likewise should be reasonably designed generally to address the fund's compliance with the 10% threshold and support the fund's reliance on the exclusion.

b. Derivatives Risk Management Program Adoption

The alternate path will require a fund to establish a derivatives risk management program and comply with the related requirements as soon as reasonably practicable. Commenters requested greater clarity of the meaning of "reasonably practicable" in the Proposing Release's discussion of the timing to establish a derivatives risk management program and comply with the rule's VaR requirements after an exceedance.⁵⁵⁸ Some commenters requested that we provide a particular remediation period to allow a fund to implement a derivatives risk management program.⁵⁵⁹ One commenter suggested that instead of providing more definitive regulatory

⁵⁵⁶ See Fidelity Comment Letter (identifying certain events that could cause a fund's derivatives exposure to exceed the 10% threshold temporarily).

⁵⁵⁷ *Id.*

⁵⁵⁸ See, e.g., BlackRock Comment Letter; Dechert Comment Letter I; SIFMA AMG Comment Letter.

⁵⁵⁹ See ICI Comment Letter (requesting a 90-calendar-day period); see also SIFMA AMG Comment Letter (requesting a 60-calendar-day period); T. Rowe Price Comment Letter (requesting a 45-calendar-day period).

guidance, the Commission should provide assurances that it will not second-guess reasonable actions and interpretations.⁵⁶⁰

We understand that there are practical considerations that would prevent a fund that is no longer a limited derivatives user from coming into immediate compliance with the VaR and program requirements. Compliance with the rule requires a fund to adopt a written derivatives risk management program that a board-approved derivatives risk manager administers. The program includes mandatory stress testing, backtesting, internal reporting and escalation, and program review elements, among other requirements. We recognize that some funds may be able to comply with the VaR and program requirements relatively quickly. Their ability to comply quickly would vary based on a variety of factors, including the complexity of a fund's derivatives use. Other funds may require additional time. For these reasons, the final rule provides, as the Commission stated in the proposal, that a fund transitioning from a limited derivatives user to full compliance with the rule's other requirements must do so as soon as reasonably practicable.⁵⁶¹ We continue to believe this standard is more appropriate than specifying in the rule the specific time periods commenters suggested or some other period. Any prescribed period might provide more or less time than a particular fund may need.

F. Approach to Leveraged/Inverse Funds

Proposed rule 18f-4 included an alternative set of requirements for leveraged/inverse funds. Under the proposal, a leveraged/inverse fund would not have been required to comply with rule 18f-4's VaR-based leverage risk limit if: (1) transactions in the fund's shares would be subject to the proposed sales practices rules, discussed below; (2) the fund limited the investment

⁵⁶⁰ Dechert Comment Letter I.

⁵⁶¹ A fund transitioning from a limited derivatives user to full compliance with the rule's other requirements may be able to reduce its exposure below the 10% threshold. If the fund were able to resume operating below the 10% threshold as a limited derivatives user, the fund could do so rather than finalizing the fund's derivatives risk management program and complying with the rule's VaR test. As noted above, however, if a fund were to exceed the 10% threshold repeatedly, and particularly if those exceedances occurred over a long period of time and did not occur in connection with extreme market events that may cause rapid and significant changes in a fund's net asset value, the fund would not appear to be using derivatives in a limited manner. *See supra* discussion following footnote 557.

results it seeks to 300% of the return (or inverse of the return) of the underlying index; and (3) the fund disclosed in its prospectus that it was not subject to rule 18f-4's leverage risk limit.⁵⁶² As discussed in more detail below, after considering comments, we are not adopting the proposed sales practices rules or the proposed exception from the VaR-based limit on leverage risk that was predicated on those rules. Leveraged/inverse funds will be subject to all of the provisions of rule 18f-4, including the relative VaR test. Rule 18f-4 will provide, however, an exception from the VaR test requirement for leveraged/inverse funds in operation as of October 28, 2020 that seek an investment result above 200% of the return (or inverse of the return) of an underlying index and satisfy certain additional conditions.

1. Proposed Alternative Requirements for Leveraged/Inverse Funds

As the Commission stated in the Proposing Release, leveraged/inverse funds present unique considerations. In contrast to other funds that use derivatives as part of their broader investment strategy, the strategy of a leveraged/inverse fund is predicated on the use of derivatives to amplify the returns (or to correspond to the inverse of the returns) of an underlying index by a specified multiple.⁵⁶³

Leveraged/inverse funds also rebalance their portfolios on a daily (or other predetermined) basis in order to maintain a constant leverage ratio. This reset, and the effects of compounding, can result in performance over longer holding periods that differs significantly from the leveraged or inverse performance of the underlying reference index over those longer

⁵⁶² See Proposing Release, *supra* footnote 1, at section II.G.3.

⁵⁶³ Proposing Release, *supra* footnote 1, at section II.G.1. The term “multiple” as used in rule 18f-4 has the same meaning as in rule 6c-11. See ETFs Adopting Release, *supra* footnote 76, at section II.A.3. As such, leveraged/inverse funds that seek returns over a predetermined time period that are not evenly divisible by 100 (e.g., 150% of the performance of an index), or that seek returns within a specified range of an index's performance (e.g., 200% to 300% of an index's performance or -200% to -300% of an index's performance), are “leveraged/inverse funds” for the purposes of rule 18f-4.

holding periods.⁵⁶⁴ This effect can be more pronounced in volatile markets.⁵⁶⁵ As a result, buy-and-hold investors in a leveraged/inverse fund who have an intermediate or long-term time horizon—and who may not evaluate their portfolios frequently—may experience large and unexpected losses or otherwise experience returns that are different from what they anticipated.⁵⁶⁶

As discussed in the Proposing Release, the Commission’s Office of Investor Education and Advocacy and FINRA have issued alerts in the past decade to highlight issues investors should consider when investing in leveraged/inverse funds.⁵⁶⁷ In addition, some commenters on the 2015 proposal indicated that at least some segment of investors may hold leveraged/inverse

⁵⁶⁴ For example, as a result of compounding, a leveraged/inverse fund can outperform a simple multiple of its index’s returns over several days of consistently positive returns, or underperform a simple multiple of its index’s returns over several days of volatile returns.

⁵⁶⁵ *See supra* footnotes 23-26 and accompanying text (discussing effects of market volatility caused by COVID-19 pandemic on issues related to funds’ use of derivatives). *See also* FINRA Regulatory Notice 09-31, Non-Traditional ETFs—FINRA Reminds Firms of Sales Practice Obligations Relating to Leveraged and Inverse Exchange-Traded Funds (June 2009) (“FINRA Regulatory Notice 09-31”) (“Using a two-day example, if the index goes from 100 to close at 101 on the first day and back down to close at 100 on the next day, the two-day return of an inverse ETF will be different than if the index had moved up to close at 110 the first day but then back down to close at 100 on the next day. In the first case with low volatility, the inverse ETF loses 0.02 percent; but in the more volatile scenario the inverse ETF loses 1.82 percent. The effects of mathematical compounding can grow significantly over time, leading to scenarios such as those noted above.”).

⁵⁶⁶ *See* Regulation Best Interest Adopting Release, *supra* footnote 12, at discussion following n.597 (stating leveraged and inverse exchange-traded products “may not be in the best interest of a retail customer absent an identified, short-term, customer-specific trading objective”); *see also* FINRA Regulatory Notice 09-31, *supra* footnote 565 (reminding member firms of their sales practice obligations relating to leveraged/inverse ETFs and stating that leveraged/inverse ETFs are typically not suitable for retail investors who plan to hold these products for more than one trading session); *see also* Fiduciary Interpretation, *infra* footnote 564 (stating that “leveraged exchange-traded products are designed primarily as short-term trading tools for sophisticated investors ... [and] require daily monitoring”); Securities Litigation and Consulting Group, *Leveraged ETFs, Holding Periods and Investment Shortfalls* (2010), at 13 (“The percentage of investors that we estimate hold [leveraged/inverse ETFs] longer than a month is quite striking.”); ETFs Adopting Release, *supra* footnote 76, at n.78 (discussing comment letters submitted by Consumer Federation of America (urging the Commission to consider additional investor protection requirements for leveraged/inverse ETFs) and by Nasdaq (stating that “there is significant investor confusion regarding existing leveraged/inverse ETFs’ daily investment horizon”)).

⁵⁶⁷ SEC Investor Alert and Bulletins, *Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors* (Aug. 1, 2009), available at <http://www.sec.gov/investor/pubs/leveragedetfs-alert.htm>. This investor alert, jointly issued by SEC staff and FINRA, followed FINRA’s June 2009 alert, which raised concerns about retail investors holding leveraged/inverse ETFs over periods of time longer than one day. *See* FINRA Regulatory Notice 09-31, *supra* footnote 565.

funds for long periods of time, which can lead to significant losses under certain circumstances.⁵⁶⁸ FINRA has sanctioned a number of brokerage firms for making unsuitable sales of leveraged/inverse ETFs.⁵⁶⁹ More recently, the Commission has brought enforcement actions against investment advisers for, among other things, soliciting advisory clients to purchase leveraged/inverse ETFs for their retirement accounts with long-term time horizons, and holding those securities in the client accounts for months or years.⁵⁷⁰

⁵⁶⁸ See, e.g., Comment Letter of the Consumer Federation of America (Mar. 28, 2016) (“There is evidence that suggests investors are incorrectly using certain alternative investments that use derivatives extensively. For example, despite the fact that double and triple leveraged ETFs are short-term trading vehicles that are not meant to be held longer than one day, a significant number of shares are held for several days, if not weeks.”). *But cf.* Comment Letter of Rafferty Asset Management (Mar. 28, 2016) (asserting that there is no evidence that investors do not understand the leveraged/inverse ETF product, citing, for example, an analysis of eight of its leveraged/inverse ETFs between May 1, 2009 and July 31, 2015, and finding an average implied holding period ranging from 1.18 days to 4.03 days and suggesting, therefore, that investors understand the products are designed for active trading). We note, however, that the analysis relied upon in the Comment Letter of Rafferty Asset Management did not analyze shareholder-level trading activity or provide any information on the distribution of shareholder holding periods.

⁵⁶⁹ See FINRA News Release, *FINRA Sanctions Four Firms \$9.1 Million for Sales of Leveraged and Inverse Exchange-Traded Funds* (May 1, 2012), available at <https://www.finra.org/newsroom/2012/finra-sanctions-four-firms-91-million-sales-leveraged-and-inverse-exchange-traded>; FINRA News Release, *FINRA Orders Stifel, Nicolaus and Century Securities to Pay Fines and Restitution Totaling More Than \$1 Million for Unsuitable Sales of Leveraged and Inverse ETFs, and Related Supervisory Deficiencies* (Jan. 9, 2014), available at <https://www.finra.org/newsroom/2014/finra-orders-stifel-nicolaus-and-century-securities-pay-fines-and-restitution-totaling>; FINRA News Release, *FINRA Sanctions Oppenheimer & Co. \$2.9 Million for Unsuitable Sales of Non-Traditional ETFs and Related Supervisory Failures* (June 8, 2016), available at <http://www.finra.org/newsroom/2016/finra-sanctions-oppenheimer-co-29-million-unsuitable-sales-non-traditional-etfs>. See also ProEquities, Inc., FINRA Letter of Acceptance, Waiver and Consent (“AWC”) No. 2014039418801 (Aug. 8, 2016), available at <http://disciplinaryactions.finra.org/Search/ViewDocument/66461>; Citigroup Global Markets Inc., FINRA Letter of AWC No. 20090191134 (May, 1, 2012), available at <http://disciplinaryactions.finra.org/Search/ViewDocument/31714>. See also Regulation Best Interest Adopting Release, *supra* footnote 12, at paragraph accompanying nn.593-98.

See also, e.g., *S.E.C. v. Hallas*, No 1:17-cv-2999 (S.D.N.Y. Sept. 27, 2017) (default judgement); *In the Matter of Demetrios Hallas*, S.E.C. Release No. 1358 (Feb. 22, 2019) (initial decision), Exchange Act Release No 85926 (May 23, 2019) (final decision) (involving a former registered representative of registered broker-dealers purchasing and selling leveraged ETFs and exchange-traded notes for customer accounts while knowingly or recklessly disregarding that they were unsuitable for these customers, in violation of section 17(a) of the Securities Act and section 10(b) and rule 10b-5 thereunder of the Exchange Act).

⁵⁷⁰ See, e.g., *In the Matter of Wells Fargo Clearing Services, LLC, et al.*, Investment Advisers Act Release No. 5451 (Feb. 27, 2020) (settled action); *In the Matter of Morgan Stanley Smith Barney, LLC*, Investment Advisers Act Release No. 4649 (Feb. 14, 2017) (settled action).

The proposal, as well as market volatility following the onset of COVID-19, each elicited feedback from investors in leveraged/inverse funds. As discussed below, the Commission received many comments on the proposal from individual investors asserting they understand the risks involved in these funds,⁵⁷¹ as well as some comments suggesting that retail investors do not understand the unique risks of leveraged/inverse funds.⁵⁷² The Commission's Office of Investor Education and Advocacy has received complaints and other communications from investors following the onset of the market volatility related to COVID-19 expressing concerns that these funds did not behave as these investors had expected, with some of these investors experiencing significant losses. Furthermore, several leveraged/inverse funds with 3x leverage or inverse multiples recently reduced their leverage multiples to 2x due to the increased market volatility caused by COVID-19.⁵⁷³

As the Commission recognized in the Proposing Release, most leveraged/inverse funds provide leveraged or inverse market exposure that exceeds 150% of the return or inverse return of the relevant index.⁵⁷⁴ Such funds would not have been able to comply with the proposed limitation on leverage risk under rule 18f-4 because they would not have been able to satisfy the proposed relative VaR test, and would not have been eligible to use the proposed absolute VaR test. As such, requiring these funds to comply with the proposed limit on leverage risk effectively would have precluded sponsors from offering the funds in their current form.

The Commission proposed a set of alternative requirements for leveraged/inverse funds that, if satisfied, would have excepted such funds from the leverage risk limit in proposed rule 18f-4. These proposed alternative requirements were designed to address the investor

⁵⁷¹ See, e.g., Comment Letter of Kerry Copple (Apr. 17, 2020); Comment Letter of Praveen Lobo (Apr. 7, 2020); Comment Letter of Arlene Hellman (Mar. 25, 2020); Comment Letter of Sean Ward (Apr. 27, 2020); Comment Letter of Stephen Cecchini (Apr. 22, 2020).

⁵⁷² See, e.g., Comment Letter of Steve Woeste (Mar. 17, 2020); Comment Letter of James Reichl (Mar. 17, 2020); Comment Letter of Steven Bell (Mar. 18, 2020); Comment Letter of Richard Herber (Mar. 17, 2020); Comment Letter of Daniel P. Smith (Jan. 29, 2020).

⁵⁷³ See, e.g., Direxion Press Release, *supra* footnote 24; see also paragraph accompanying *supra* footnotes 23–26 (discussing effects of COVID-19 related volatility on funds' use of derivatives).

⁵⁷⁴ See Proposing Release, *supra* footnote 1, at nn.317-318 and accompanying text.

protection concerns that underlie section 18 of the Investment Company Act, in part, by helping to ensure that retail investors in leveraged/inverse funds are limited to those investors who are capable of evaluating the risks these products present. They also would have limited the amount of leverage that leveraged/inverse funds subject to rule 18f-4 can obtain to 300% of the return (or inverse of the return) of the underlying index.

Proposed rule 15l-2 under the Exchange Act and rule 211(h)-1 under the Advisers Act would have required broker-dealers and investment advisers, respectively, to exercise due diligence on retail investors before approving retail investor accounts to invest in “leveraged/inverse investment vehicles.” As defined in the proposed sales practices rules, leveraged/inverse investment vehicles include leveraged/inverse funds and certain exchange-listed commodity- or currency-based trusts or funds that use a similar leveraged/inverse strategy.⁵⁷⁵

The proposed due diligence requirements provided that a broker-dealer or investment adviser must exercise due diligence to ascertain the essential facts relative to the retail investor, his or her financial situation, and investment objectives before approving his or her account to invest in leveraged/inverse investment vehicles. This requirement would have required the broker-dealer or investment adviser to seek to obtain certain information about the retail investor, including, at a minimum, information about his or her financial status (*e.g.*, employment status, income, and net worth (including liquid net worth)); and information about his or her investment objectives generally and his or her anticipated investments in, and experience with, leveraged/inverse investment vehicles (*e.g.*, general investment objectives, percentage of liquid net worth intended for investment in leveraged/inverse investment vehicles, and investment experience and knowledge).

The proposed due diligence requirement was designed to provide the broker-dealer or investment adviser with a comprehensive picture of the retail investor on which to evaluate whether the retail investor has the financial knowledge and experience to be reasonably expected

⁵⁷⁵ See Proposing Release, *supra* footnote 1, at section II.G.2.

to be capable of evaluating the risks of buying and selling leveraged/inverse investment vehicles.⁵⁷⁶

The proposed sales practices rules were generally modeled after current FINRA options account approval requirements for broker-dealers, in part based on the Commission's belief that leveraged/inverse investment vehicles, when held over longer periods of time, may have certain similarities to options.⁵⁷⁷ Under the FINRA rules for options, a broker-dealer may not accept a customer's options order unless the broker-dealer has approved the customer's account for options trading.⁵⁷⁸ This account-approval requirement applies to all customers who wish to trade options, including self-directed investors who do not receive advice or recommendations from the broker-dealer.

The Commission received significant comment on the proposed alternative requirements for leveraged/inverse funds. Most commenters categorically opposed the adoption of the proposed sales practices rules. These commenters provided numerous reasons for their opposition, including:

- The proposed sales practices rules would restrict investor choice because retail investors who wish to invest or continue to invest in leveraged/inverse investment products, including investors who understand their unique risks, might not be approved for trading in those products by a broker-dealer or investment adviser.⁵⁷⁹
- The proposed sales practices rules would provide few additional protections for investors because their requirements are duplicative of existing Commission requirements for the

⁵⁷⁶ In addition, the proposed sales practices rules would have required broker-dealers and investment advisers to adopt and implement written policies and procedures addressing compliance with the applicable sales practices rule, and would have required broker-dealers and investment advisers to retain certain records arising from the due diligence and account approval requirements. *See* Proposing Release, *supra* footnote 1, at sections II.G.2.b-c.

⁵⁷⁷ *See, e.g.*, FINRA rule 2360(b)(16)–(17) (requiring firm approval, diligence and recordkeeping for options accounts); *see also* Proposing Release, *supra* footnote 1, at nn.325–327 and accompanying text.

⁵⁷⁸ FINRA rule 2360(b)(16).

⁵⁷⁹ *See, e.g.*, Comment Letter of Nathaniel Reynolds (Apr. 28, 2020); Comment Letter of Steve Ludwig (Apr. 22, 2020); Comment Letter of Jesse Underwood (Apr. 17, 2020); Comment Letter of Angie Hall (Apr. 17, 2020); Comment Letter of Barbara Kalib (Mar. 22, 2020).

activities of broker-dealers and investment advisers in the recommended transaction context, including rule 15c-1 under the Exchange Act (“Regulation Best Interest”) and investment advisers’ fiduciary obligations to their clients.⁵⁸⁰

- The Commission should not address the investor protection concerns underlying section 18 of the Investment Company Act by imposing sales practice requirements on financial intermediaries rather than placing requirements on leveraged/inverse funds themselves.⁵⁸¹
- The operational burden and expense of implementing the due diligence and account approval requirements, as well as the potential legal liability arising from the performance of those requirements, could cause broker-dealers and investment advisers simply to stop offering leveraged/inverse investment vehicles to retail investors, causing harm to leveraged/inverse fund sponsors and restricting investor choice.⁵⁸²
- The FINRA options account-approval framework is not well suited as a model for leveraged/inverse investment vehicles because options trading strategies are significantly more complex and have significantly more risk, including the risk that an investor could lose more than the amount invested, than investments in leveraged/inverse investment vehicles.⁵⁸³

⁵⁸⁰ See, e.g., Comment Letter of TD Ameritrade (May 4, 2020) (“TD Ameritrade Comment Letter”); SIFMA Comment Letter. See also Regulation Best Interest Adopting Release, *supra* footnote 12; Commission Interpretation Regarding Standard of Conduct for Investment Advisers, Investment Advisers Act Release No. 5248 (June 5, 2019) [84 FR 33669 (July 12, 2019)] (“Fiduciary Interpretation”).

⁵⁸¹ See Direxion Comment Letter; see also Comment Letter of Charles Schwab & Co., Inc. (Mar. 24, 2020) (“Schwab Comment Letter”).

⁵⁸² See, e.g., Comment Letter of Americans for Limited Government (Mar. 24, 2020) (“Americans for Limited Government Comment Letter”); SIFMA Comment Letter; Direxion Comment Letter; ProShares Comment Letter; Schwab Comment Letter.

⁵⁸³ See, e.g., Schwab Comment Letter; SIFMA Comment Letter. Several commenters stated that the FINRA options rule, unlike the proposed sales practices rules, applies only to transactions for which there is a broker-dealer recommendation. See, e.g., Direxion Comment Letter. Although the proposed sales practice rules incorporated one element from the FINRA rule that applies to recommended options transactions, FINRA rule 2360(b)(19), the FINRA rule on which the proposed sales practices rules principally were based, rule 2360(b)(16), applies regardless of whether the broker-dealer has made a recommendation.

- The proposed sales practices rules, because they would apply to only two categories of leveraged/inverse products—leveraged/inverse funds and listed commodity pools that use leveraged/inverse strategies—would not sufficiently advance the Commission’s investor protection goals. Exchange-traded notes (“ETNs”), for example, would not be subject to the proposed sales practices rules, but can use leveraged/inverse strategies with a nearly identical risk/return profile to leveraged/inverse investment vehicles, and can present additional risks, including the risk of issuer default. Accordingly, the proposed sales practices rules, if adopted, could cause: (1) sponsors of leveraged/inverse investment vehicles to offer leveraged/inverse strategies as ETNs rather than funds or listed commodity pools; and (2) retail investors to seek out leveraged/inverse strategies through ETNs or other products that would not be subject to the requirements of the proposed sales practices rules.⁵⁸⁴
- Commenters questioned whether the proposed sales practices rules regulate “sales practices” and therefore the Commission’s authority to promulgate the proposed rules.⁵⁸⁵

Some commenters expressed support for the proposed sales practices rules on the basis that additional investor protections are warranted in light of the unique characteristics and risks of leveraged/inverse investment vehicles.⁵⁸⁶ In addition, several commenters stated that many retail investors do not understand the risks associated with investing in leveraged/inverse investment vehicles.⁵⁸⁷

⁵⁸⁴ See, e.g., Direxion Comment Letter; Comment Letter of Mark J. Flannery, Ph.D. (Mar. 31, 2020) (“Flannery Comment Letter”).

⁵⁸⁵ See, e.g., Direxion Comment Letter; ProShares Comment Letter; Comment Letter of Virtu Financial (Apr. 24, 2020).

⁵⁸⁶ See, e.g., Herber Comment Letter; Comment Letter of Tom Antony (Apr. 9, 2020); Comment Letter of Thomas Garman (Mar. 6, 2020); Comment Letter of Patrick Oberman (Feb. 20, 2020); NASAA Comment Letter. One commenter supported the sales practices rules as proposed, but suggested that the Commission not amend rule 6c-11 to include leveraged/inverse funds within that rule’s scope (as proposed), without first implementing additional identification and categorization requirements for exchange-traded products generally. See BlackRock Comment Letter (also discussed at *infra* footnote 618 and accompanying text).

⁵⁸⁷ See *supra* footnote 572.

Several commenters recommended alternatives to the proposed sales practices rules that they believed would address investor protection concerns associated with leveraged/inverse funds. Commenters suggested that we should place additional disclosure-based requirements on intermediaries offering leveraged/inverse investment vehicles to retail investors, rather than due diligence and account approval requirements.⁵⁸⁸ Some commenters suggested we require broker-dealers to: (1) provide their self-directed customers with short, plain-English disclosures of the potential risks of trading leveraged/inverse investment vehicles, both at the point of sale and periodically thereafter; and (2) require such customers to provide an acknowledgement of receipt of these disclosures.⁵⁸⁹ Another commenter suggested that we require broker-dealers and investment advisers to adopt and implement policies and procedures designed to protect investors in leveraged/inverse investment vehicles.⁵⁹⁰ This commenter stated that such policies and procedures could include, among other things, procedures for reviewing purchases of leveraged/inverse investment vehicles and monitoring accounts that hold positions in leveraged/inverse investment vehicles for extended time periods.

Commenters also suggested that we allow leveraged/inverse funds with a stated target multiple that is equal to or below the VaR-based limit on leveraged risk in rule 18f-4 (*e.g.*, a fund that seeks 100% inverse exposure to the relevant index) to comply with all the requirements of rule 18f-4, including the VaR-based risk limitation, rather than requiring broker-dealers or investment advisers to comply with the proposed sales practices rules with respect to transactions in these funds. According to these commenters, leveraged/inverse funds that do not exceed the VaR-based risk limit (and thus would not require an exception to the VaR limit) should not be subject to the proposed sales practices rules.⁵⁹¹

⁵⁸⁸ See, *e.g.*, Direxion Comment Letter; Schwab Comment Letter.

⁵⁸⁹ See, *e.g.*, Schwab Comment Letter; TD Ameritrade Comment Letter; *see also* NASAA Comment Letter.

⁵⁹⁰ See Comment Letter of Cambridge Investment Research, Inc. (May 1, 2020) (“Cambridge Investment Research Comment Letter”).

⁵⁹¹ See, *e.g.*, Direxion Comment Letter; ProShares Comment Letter. *See also* Comment Letter of Innovator Capital Management (May 8, 2020) (“Innovator Comment Letter”).

2. Treatment of Leveraged/Inverse Funds Under Rule 18f-4

After considering the comments discussed above, we have determined not to adopt the proposed sales practices rules or the proposed exception from the leverage risk limit that was predicated on broker-dealers' and investment advisers' compliance with the sales practices rules. Leveraged/inverse funds, like funds generally, will be required to comply with the VaR-based limit on fund leverage risk in rule 18f-4, as adopted, with the exception of certain existing funds discussed in section II.F.3 below.

We recognize, as commenters suggested, that our proposal to address the investor protection concerns underlying section 18 by placing requirements on the activities of broker-dealers and investment advisers that offer leveraged/inverse funds, rather than on the leveraged/inverse funds themselves, presents unique challenges. These challenges include, as commenters stated, that broker-dealers and investment advisers would be required to carry out new due diligence requirements designed to address concerns under section 18, and that section 18 does not apply to the broker-dealers and investment advisers that would be subject to those new requirements.⁵⁹² We also recognize that many leveraged/inverse funds can comply with final rule 18f-4, particularly given the adjustments to the relative VaR test. We believe the approach we are adopting addresses many of the concerns raised by commenters regarding the proposed sales practices rules. We believe the final approach will preserve meaningful choice for investors by permitting a substantial number of leveraged/inverse funds to continue to operate under rule 18f-4, subject to the rule's requirements.

Leveraged/inverse funds generally will be subject to the requirements of rule 18f-4 on the same basis as other funds that are subject to that rule, including the VaR-based leverage risk

⁵⁹² Some commenters also expressed the concern that a leveraged/inverse fund sponsor would not be able to ensure that a broker-dealer or investment adviser complied with the sales practices rules. *See, e.g.*, Direxion Comment Letter. The alternative requirements in proposed rule 18f-4 would have applied to leveraged/inverse funds that were within the scope of the proposed sales practices rules. Broker-dealers and investment advisers would have been responsible for their own compliance with the sales practices rules.

limit.⁵⁹³ Leveraged/inverse funds, because they provide a leveraged return of an index, will be subject to the rule's relative VaR and, under the rule, a leveraged/inverse fund must use the index it tracks as its designated reference portfolio.⁵⁹⁴ For a leveraged/inverse fund that seeks, directly or indirectly, to provide investment returns that correspond to 200% of the performance or inverse performance of an index, we recognize that there may be minor deviations between the VaR of the fund and 200% of the VaR of its designated index. These are attributable to financing costs embedded in the fund's derivatives and valuation differences between the fund's portfolio and the index it tracks.⁵⁹⁵ These minor differences would be expected to cause a fund's VaR to exceed 200% of the VaR of its designated index by a *de minimis* amount from time to time where the fund is seeking to provide investment exposure equal to 200% of the return, or inverse of the return, of an index. We would not view these *de minimis* deviations by a leveraged/inverse fund as exceedances of the relative VaR test under these circumstances because they do not reflect an increase in the fund's leveraged or inverse market exposure. Therefore, we would not view these deviations, alone, as giving rise to the remediation requirements in rule 18f-4 for funds that are not in compliance with the VaR test, or the requirements for funds to file Form N-RN to report information about VaR test breaches to the Commission.

In addition, where a fund's investment strategy is to provide the inverse performance, or a multiple of the inverse performance, of an index, we anticipate the fund would calculate the VaR of the index based upon the index's inverse performance for purposes of the relative VaR test. This is because, for inverse funds, the potential for losses that VaR seeks to measure is driven by the potential for increases in the index.

⁵⁹³ The Commission considered and requested comment on this alternative in section III.E.5 of the Proposing Release.

⁵⁹⁴ As discussed above, if a fund's investment objective is to track the performance of an unleveraged index—as we understand to be the case for leveraged/inverse funds—the fund will be required under the final rule to use that index as the fund's designated reference portfolio. *See supra* section II.D.2.b.

⁵⁹⁵ *See, e.g.,* ProShares Comment Letter.

3. Standards of Conduct for Broker-Dealers and Registered Investment Advisers

Although the final rules we are adopting will not include the proposed sales practices rules, we agree with commenters that, in the context of recommended transactions, certain of the investor protection concerns the Commission articulated in the Proposing Release regarding leveraged/inverse investment vehicles are addressed by the best interest standard of conduct for broker-dealers under Regulation Best Interest. Further, in the context of advisory relationships, the fiduciary obligations of investment advisers, as the Commission discussed in the Fiduciary Interpretation, address many of the same concerns. The best interest standard of conduct for broker-dealers and the fiduciary obligations of investment advisers apply to transactions in all exchange-traded products where the transaction is recommended by a broker-dealer or pursuant to the advice of an investment adviser. These include transactions in leveraged/inverse funds and listed commodity pools that the proposed sales practices rules covered, as well as transactions in products such as ETNs that the proposed rules did not address.

The Commission's adoption of Regulation Best Interest enhanced the standard of conduct for broker-dealers beyond the then-existing suitability obligations by requiring broker-dealers to act in the best interest of a retail customer when recommending a securities transaction or investment strategy involving securities to a retail customer.⁵⁹⁶ To meet this best interest standard, a broker-dealer must, among other things, satisfy its care obligation. The care obligation requires the broker dealer to exercise reasonable diligence, care, and skill to understand the potential risks, rewards, and costs associated with the recommendation, and have a reasonable basis to believe that the recommendation could be in the best interest of at least some retail customers. This requirement is especially important where broker-dealers recommend products that are particularly complex or risky, including leveraged/inverse funds and other products that follow a similar leveraged or inverse strategy. Broker-dealers recommending such products should understand that leveraged/inverse products that are reset

⁵⁹⁶ Regulation Best Interest Adopting Release, *supra* footnote 12.

daily may not be suitable for, and as a consequence also not in the best interest of, retail customers who plan to hold them for longer than one trading session, particularly in volatile markets. A broker-dealer cannot establish a reasonable basis to recommend leveraged/inverse products to retail customers without understanding the terms, features, and risks of these products.⁵⁹⁷ The care obligation also requires a broker-dealer to have a reasonable basis to believe that a recommendation provided to a retail customer is in the customer's best interest. Leveraged/inverse products may not be in the best interest of a retail customer absent an identified, short-term, customer-specific trading objective.

Similarly, as the Commission stated in the Fiduciary Interpretation, a reasonable belief that investment advice is in the best interest of a client requires that an adviser conduct a reasonable investigation into the investment sufficient not to base its advice on materially inaccurate or incomplete information. An investment adviser also must have a reasonable belief that the advice it provides is in the best interest of the client based on the client's investment objectives.⁵⁹⁸ Complex products, such as leveraged/inverse products that are designed primarily as short-term trading tools for sophisticated investors, may not be in the best interest of a retail client absent an identified, short-term, client-specific trading objective.⁵⁹⁹ Moreover, to the extent that such products are in the best interest of a retail client initially, they would require daily monitoring by the adviser.

To satisfy their respective obligations in making recommendations or giving investment advice to retail investors, broker-dealers and investment advisers need to ascertain certain information about their customer or client, which can include the same kinds of information the Commission proposed that firms would collect under the sales practices rules' due diligence requirement.⁶⁰⁰ Broker-dealers must develop an investment profile for a retail customer based on

⁵⁹⁷ *Id.* at nn.593-597 and accompanying text.

⁵⁹⁸ *See* Fiduciary Interpretation, *supra* footnote 580.

⁵⁹⁹ *Id.* at n.39 and accompanying text.

⁶⁰⁰ The proposed sales practices rules would have required broker-dealers and investment advisers to seek to obtain information about the retail investor, including, at a minimum, his or her

the customer's age, other investments, financial situation and needs, tax status, investment objectives, investment experience, investment time horizon, liquidity needs, risk tolerance, and any other information the retail customer may disclose to the broker-dealer.⁶⁰¹ Similarly, investment advisers are required to develop a reasonable understanding of a retail client's objectives, which should, at a minimum, include a reasonable inquiry into the client's financial situation, level of financial sophistication, investment experience, and financial goals.⁶⁰²

4. Staff Review of Regulatory Requirements Relating to Complex Financial Products

We recognize that while Regulation Best Interest applies to all exchange-traded products, including products that the proposed sales practices rules did not cover, it applies only where a broker-dealer recommends a transaction or an investment strategy involving securities to a retail customer. Similarly, rule 18f-4 does not address the universe of potential investor protection issues related to transactions in complex products, as it applies only to registered investment companies and business development companies, and its requirements for leveraged/inverse funds specifically address the section 18 concerns that these funds raise. As such, neither Regulation Best Interest nor rule 18f-4 applies where a retail investor with a self-directed account invests in ETNs or other complex financial products that use leveraged/inverse strategies with a nearly identical risk/return profile to leveraged/inverse funds or in other complex investment products.

Accordingly, we have directed the staff to review the effectiveness of the existing regulatory requirements in protecting investors—particularly those with self-directed accounts—

investment objectives (*e.g.*, safety of principal, income, growth, trading profits, speculation) and time horizon; employment status (name of employer, self-employed or retired); estimated annual income from all sources; estimated net worth (exclusive of family residence); estimated liquid net worth (cash, liquid securities, other); percentage of the customer's estimated liquid net worth that he or she intends to invest in leveraged/inverse investment vehicles; and investment experience and knowledge (*e.g.*, number of years, size, frequency and type of transactions) regarding leveraged/inverse investment vehicles, options, stocks and bonds, commodities, and other financial instruments. *See* Proposing Release, *supra* footnote 1, at n.333 and accompanying text.

⁶⁰¹ *See* Regulation Best Interest Adopting Release, *supra* footnote 12, at paragraph (a)(2).

⁶⁰² *See* Fiduciary Interpretation, *supra* footnote 580, at section II.B.1.

who invest in leveraged/inverse products and other complex investment products.⁶⁰³ Based on this review, the staff will make recommendations to the Commission for potential new rulemakings, guidance, or other policy actions, if appropriate. As part of this review, the staff will consider whether the Commission’s promulgation of any additional requirements for these products may be effective in helping to promote retail investor understanding of these products’ unique characteristics and risks. The staff may consider requirements that include, among other things, additional obligations for broker-dealers and investment advisers relating to leveraged/inverse investment vehicles and other complex products, as well as the alternatives to the proposed sales practices rules that commenters recommended, including: (1) point-of-sale disclosure; and (2) policies and procedures tailored to the risks of leveraged/inverse investment vehicles and other complex products.⁶⁰⁴

5. Treatment of Existing Leveraged/Inverse Funds that Seek to Provide Leveraged or Inverse Market Exposure Exceeding 200% of the Return of the Relevant Index

Under the relative VaR test with a 200% limit, as adopted, leveraged/inverse funds that seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index (“over-200% leveraged/inverse funds”) generally could not satisfy the limit on fund leverage risk in rule 18f-4. As such, over-200% leveraged/inverse funds in operation today would have to significantly change their investment strategies if they were required to comply with rule 18f-4’s relative VaR test. While we believe that it is important to continue to consider these funds in light of investor protection concerns, and the staff review that we discuss above will assess these funds in addition to other complex investment products, we believe that these concerns would most appropriately be addressed holistically as a result of any Commission action that may result from the staff review.

⁶⁰³ See Joint Statement Regarding Complex Financial Products and Retail Investors (Oct. 28, 2020), available at <https://www.sec.gov/news/public-statement/clayton-blass-hinman-redfearn-complex-financial-products-2020-10-28>.

⁶⁰⁴ See *supra* footnotes 588-590 and accompanying text (discussing alternative approaches proposed by commenters).

Accordingly, rule 18f-4 includes a provision permitting over-200% leveraged/inverse funds to continue operating at their current leverage levels, provided they comply with all the provisions of rule 18f-4 other than the VaR-based limit on fund leverage risk and meet certain additional requirements, as discussed below. This provision recognizes the unique circumstances facing these funds, which have existed for years under Commission exemptive orders prior to our reconsideration of our regulatory approach regarding fund derivative use under section 18 and our adoption of a new approach for such regulation under rule 18f-4. Given this history and in light of the staff review discussed above, we have determined to allow these existing funds to continue but subject to further constraints and a limitation to funds currently in operation because of the section 18 concerns that these highly leveraged funds present.⁶⁰⁵ Because the final rule limits this treatment to those over-200% leveraged/inverse funds that are currently in operation, absent a different regulatory approach following the staff review that might permit additional over-200% leveraged/inverse funds, the number of these funds may decrease over time, to the extent that fund sponsors remove existing funds from the market or reduce their leverage multiples.⁶⁰⁶

The final rule's approach to these funds is limited to a leveraged/inverse fund that cannot comply with rule 18f-4's limit on fund leverage risk and that, as of October 28, 2020, is: (1) in operation; (2) has outstanding shares issued in one or more public offerings to investors; and (3) discloses in its prospectus a leverage multiple or inverse multiple that exceeds 200% of the performance or the inverse of the performance of the underlying index.⁶⁰⁷ A leveraged/inverse fund that can comply with rule 18f-4's limit on leverage risk because, for example, it rebalances

⁶⁰⁵ See rule 18f-4(c)(5). In addition, under rule 18f-4(a), "fund" is defined, in part, to mean a registered open-end or closed-end company or a business development company, including any separate series thereof.

⁶⁰⁶ See *infra* section III.C.5. (discussion in the Economic Analysis section about, among other things, the potential market effects of the Commission's approach with respect to over-200% leveraged/inverse funds).

We understand that there are approximately 70 over-200% leveraged/inverse funds currently in operation. These funds represent approximately 0.07% of the total assets held by funds and business development companies subject to rule 18f-4. See *infra* section III.B.

⁶⁰⁷ See rule 18f-4(c)(5)(i).

its portfolios less frequently than daily or subsequently reduces its disclosed leverage or inverse multiple to 200% or less, will not qualify for the exception from the leverage risk limit and will be required to comply with all the provisions of rule 18f-4.

Rule 18f-4 provides that an over-200% leveraged/inverse fund relying on this exception may not change the underlying market index or increase the level of leveraged or inverse market exposure the fund seeks, directly or indirectly, to provide.⁶⁰⁸ The Commission's exemptive orders for leveraged/inverse ETFs contemplate those funds seeking investment results corresponding to a multiple of the return (or inverse of the return) of an underlying index that does not exceed 300%, and thus no funds with an over-300% leverage multiple or inverse multiple currently exist. We are therefore not adopting the proposed requirement that leveraged/inverse funds must not seek or obtain, directly or indirectly, investment results exceeding 300% of the return (or inverse of the return) of the underlying index.⁶⁰⁹

We also are requiring existing over-200% leveraged/inverse funds to disclose in their prospectuses that they are not subject to the condition of rule 18f-4 limiting fund leverage risk.⁶¹⁰ Under the final rule requirement, the prospectus disclosure that over-200% leveraged/inverse funds will provide is identical to the prospectus disclosure that all leveraged/inverse funds would have been required to provide under the proposal.⁶¹¹ The proposed prospectus disclosure requirement was designed to provide investors and the market with clarity that leveraged/inverse funds (due to the proposed sales practices rules) were not subject to rule 18f-4's limit on fund leverage risk.⁶¹² We are not requiring all leveraged/inverse funds to provide this disclosure, as the Commission proposed, because leveraged/inverse funds other than the existing over-200%

⁶⁰⁸ See rule 18f-4(c)(5)(ii).

⁶⁰⁹ See Proposing Release, *supra* footnote 1, at nn.349-350 and accompanying text.

⁶¹⁰ See rule 18f-4(c)(5)(iii).

⁶¹¹ See proposed rule 18f-4(c)(4)(ii).

⁶¹² The Commission received one comment questioning our proposal to require all leveraged/inverse funds, as defined in the Proposing Release, to disclose in their prospectuses that they are not subject to the leverage risk limit. See Direxion Comment Letter. Because we are not adopting the sales practices rules, we believe that the adoption of this disclosure requirement remains appropriate.

leveraged/inverse funds will be required to comply with the final rule's limit on fund leverage risk. We continue to believe that such a disclosure for over-200% leveraged/inverse funds is appropriate, particularly because we have determined not to adopt the proposed sales practices rules at this time.

6. Amendments to Rule 6c-11 under the Investment Company Act and Proposed Rescission of Exemptive Relief for Leveraged/Inverse ETFs

We are amending rule 6c-11 to include leveraged/inverse ETFs within the scope of that rule, provided that they comply with the applicable provisions of rule 18f-4. Rule 6c-11 permits ETFs that satisfy certain conditions to operate without obtaining an exemptive order from the Commission.⁶¹³ As discussed in the Proposing Release, rule 6c-11 includes a provision excluding leveraged/inverse ETFs from the scope of ETFs that may rely on that rule.⁶¹⁴ Leveraged/inverse ETFs, therefore, currently rely on their Commission exemptive orders. In adopting rule 6c-11, the Commission stated that the particular section 18 concerns raised by leveraged/inverse ETFs' use of derivatives distinguish those funds from the other ETFs permitted to rely on that rule, and that those section 18 concerns would be more appropriately addressed in a rulemaking addressing the use of derivatives by funds more broadly.⁶¹⁵ The Commission further stated that leveraged/inverse ETFs are similar in structure and operation to the other types of ETFs that are within the scope of rule 6c-11.⁶¹⁶

The Commission proposed to amend rule 6c-11 to remove the provision excluding leveraged/inverse ETFs from the scope of ETFs that may rely on that rule. Two commenters expressed support for the proposal.⁶¹⁷ One commenter, however, stated that the Commission

⁶¹³ See ETFs Adopting Release, *supra* footnote 76.

⁶¹⁴ See rule 6c-11(c)(4).

⁶¹⁵ See ETFs Adopting Release, *supra* footnote 76, at nn.72-75 and accompanying text.

⁶¹⁶ See *id.* at text following n.86. In addition, one sponsor of leveraged/inverse ETFs has stated that its ETFs would prefer to rely on rule 6c-11 over their exemptive orders and that leveraged/inverse ETFs would be able to comply with rule 6c-11 because they are structured and operated in the same manner as other ETFs that fall within the scope of that rule. See *id.* at n.83 and accompanying text.

⁶¹⁷ See, e.g., Direxion Comment Letter; ProShares Comment Letter.

should not do so without first implementing a system for the categorization and identification of exchange-traded products (“ETPs”).⁶¹⁸ The Commission has previously addressed the implementation of an ETP naming system in the ETFs Adopting Release, and, as stated in that release, we encourage ETP market participants to continue engaging with their investors, with each other, and with the Commission on these issues.⁶¹⁹

Because leveraged/inverse ETFs are similar in structure and operation to the other types of ETFs that are within the scope of rule 6c-11, we believe it is appropriate to permit leveraged/inverse funds to rely on rule 6c-11 when they satisfy the applicable conditions in rule 18f-4 as adopted. In addition, to provide greater clarity to investors and the market regarding the conditions we are placing on leveraged/inverse ETFs under rules 18f-4 and 6c-11, we are amending rule 6c-11 to require a leveraged/inverse ETF to comply with the applicable provisions of rule 18f-4 to operate as an ETF under rule 6c-11.⁶²⁰

Because the amendments to rule 6c-11 will permit a leveraged/inverse ETF to rely on that rule rather than its exemptive order, we are rescinding the exemptive orders the Commission has previously issued to leveraged/inverse ETFs, as proposed.⁶²¹ We believe that amending rule 6c-11 and rescinding these exemptive orders will help promote a more level playing field and greater competition by allowing any sponsor to form and launch a leveraged/inverse ETF whose target multiple is equal to or less than 200% of its reference portfolio, subject to the conditions in rules 6c-11 and 18f-4. We are rescinding the exemptive orders provided to leveraged/inverse

⁶¹⁸ See BlackRock Comment Letter.

⁶¹⁹ ETFs Adopting Release, *supra* footnote 76, at n.406 and accompanying and following paragraphs.

⁶²⁰ In addition, in 2019 the Commission issued an order granting an exemption from certain provisions of the Exchange Act and the rules thereunder to broker-dealers and certain other persons, as applicable, that engage in certain transactions with ETFs relying on rule 6c-11, subject to certain conditions. See Order Granting a Conditional Exemption from Exchange Act Section 11(d)(1) and Exchange Act Rules 10b-10; 15c1-5; 15c1-6; and 14e-5 for Certain Exchange Traded Funds, Exchange Act Release No. 87110 (Sept. 25, 2019) [84 FR 57089 (Oct. 24, 2019)] (“ETF Exchange Act Order”). These exemptions will apply to transactions in the securities of leveraged/inverse ETFs that rely on rule 6c-11, provided the conditions of the ETF Exchange Act Order are satisfied.

⁶²¹ We did not receive any comments directly supporting or opposing our proposal to rescind the Commission exemptive orders to leveraged/inverse ETFs.

ETFs on the compliance date for rule 18f-4, in eighteen months.⁶²² We believe that providing an eighteen-month period for existing leveraged/inverse ETFs also will provide time for them to prepare to comply with rule 6c-11 rather than their exemptive orders, and will provide the staff with time to conduct its review of leveraged/inverse and other complex products, as discussed above, and to provide a recommendation to the Commission.⁶²³

G. Amendments to Fund Reporting Requirements

We are adopting, with certain modifications from the proposal, amendments to the reporting requirements for funds that will rely on new rule 18f-4—in particular, amendments to Forms N-PORT, N-LIQUID (which we will re-title as “Form N-RN,” to reflect that funds will use this form to file risk notices with the Commission and not solely reports related to rule 22e-4), and Form N-CEN.⁶²⁴ These amendments are designed to enhance the Commission’s ability to oversee funds’ use of and compliance with the new rule effectively, and to provide the Commission and the public additional information regarding funds’ use of derivatives.⁶²⁵

⁶²² See *infra* section II.L.

⁶²³ See ETFs Adopting Release, *supra* footnote 76, at text following n.451.

⁶²⁴ 17 CFR 274.150; 17 CFR 274.223; and 17 CFR 249.330 and 17 CFR 274.101.

⁶²⁵ The funds that will rely on rule 18f-4 (other than BDCs) generally are subject to the reporting requirements of Form N-PORT. All registered management investment companies, other than registered money market funds and small business investment companies, are required to electronically file with the Commission, on a quarterly basis, monthly portfolio investment information on Form N-PORT, as of the end of each month. See Investment Company Reporting Modernization, Investment Company Act Release No. 32314 (Oct. 13, 2016) [81 FR 81870 (Nov. 18, 2016)] (“Reporting Modernization Adopting Release”), and Investment Company Act Release No. 32936 (Dec. 8, 2017) [82 FR 58731 (Dec. 14, 2017)] (modifying approach to the requirement to submit reports on Form N-PORT).

Certain information that funds will report on Form N-PORT will be publicly available. For these data elements, only information that funds report for the third month of each fund’s fiscal quarter on Form N-PORT will be publicly available (60 days after the end of the fiscal quarter). See Amendments to the Timing Requirements for Filing Reports on Form N-PORT, Investment Company Act Release No. 33384 (Feb. 27, 2019) [84 FR 7980 (Mar. 6, 2019)].

Currently, only open-end funds that are not regulated as money market funds under rule 2a-7 under the Investment Company Act are required to file current reports on Form N-LIQUID, under section 30(b) of the Investment Company Act and rule 30b1-10 under the Act. See Investment Company Liquidity Risk Management Programs, Investment Company Act Release No. 32315 (Oct. 13, 2016) [81 FR 82142 (Nov. 18, 2016)], at section III.L.2 (“Liquidity Adopting Release”). We are amending Form N-LIQUID (newly-retitled Form N-RN) and rule 30b1-10, and adopting rule 18f-4(c)(7) to add new VaR-related items to the form, and to extend the requirement to file current reports with respect to these new items to any fund (including registered open-end funds,

Most commenters generally supported, or stated they did not object to, requiring funds to report to the Commission the information that the proposal would require about their derivatives use.⁶²⁶ One commenter broadly opposed the new reporting requirements, in general, because they “could introduce a substantial additional reporting burden for funds, particularly in the context of volatile market conditions.”⁶²⁷ No other commenter opposed the proposed reporting requirements in the aggregate. We continue to believe that the new reporting requirements will allow the Commission to identify and monitor industry trends, as well as risks associated with funds’ investments in derivatives (including by requiring current, non-public reporting to the Commission when certain significant events related to a fund’s leverage risk occur). The amendments will aid the Commission in evaluating the activities of investment companies in order to better carry out its regulatory functions. Accordingly, we are adopting, consistent with the proposal, the requirements to report the specified information to the Commission on Forms N-PORT, N-RN, and N-CEN, with certain modifications discussed below.

Commenters had mixed views regarding the public availability of certain information that funds would provide in response to the proposed reporting requirements. As discussed in more detail below, after considering these comments we are making certain of these data elements non-public, while making other information publicly available as proposed.

1. Amendments to Form N-PORT

We are adopting amendments to Form N-PORT to add new items to Part B (“Information About the Fund”), and revise some of the form’s General Instructions.⁶²⁸ As proposed, these amendments would have required all funds to report information about their derivatives

registered closed-end funds, and BDCs) that relies on rule 18f-4 and that is subject to the rule’s limit on leverage risk.

The funds that will rely on rule 18f-4 (other than BDCs) generally are subject to the reporting requirements of Form N-CEN. Specifically, all registered investment companies (excluding face amount certificate companies) are required to file annual reports on Form N-CEN. *See* Reporting Modernization Adopting Release.

⁶²⁶ *See, e.g.*, J.P. Morgan Comment Letter; AQR Comment Letter I; Fidelity Comment Letter; Capital Group Comment Letter; SIFMA AMG Comment Letter.

⁶²⁷ ISDA Comment Letter.

⁶²⁸ *See* General Instructions E (Definitions) and F (Public Availability) to Form N-PORT.

exposure, as well as VaR information (as applicable) on Form N-PORT. However, the amendments we are adopting incorporate several changes from the proposal:

- While the proposal would have required all funds to report their aggregate derivatives exposure, under the final rules only a fund that relies on the limited derivatives exception in rule 18f-4 will be required to report this information.⁶²⁹ A limited derivatives user will also be required to break out certain aspects of its derivatives exposure (*e.g.*, exposure from currency and interest rate derivatives that hedge related risks), and report the number of business days (in excess of the five-business-day remediation period provided in rule 18f-4) that derivatives exposure exceeded 10% of its net assets, to assist the Commission in monitoring compliance with the limited derivatives user exception.⁶³⁰
- We are tailoring the VaR-related information we are requiring funds to report to include the VaR-related information that we believe most effectively portrays a fund's use of derivatives.⁶³¹
- Finally, we are modifying the proposed requirement to make all information reported in response to the new N-PORT items publicly available. In a change from the proposal, information about a limited derivatives user's derivatives exposure, as well as a fund's median daily VaR, median VaR ratio and VaR backtesting exceptions, will be confidentially reported to the Commission and not publicly disclosed.⁶³² Information about the fund's designated reference portfolio will be made publicly available, as proposed.

We discuss all of these changes in more detail below.

⁶²⁹ Item B.9 of Form N-PORT.

⁶³⁰ *Id.*

⁶³¹ See Item B.10 of Form N-PORT; see also *infra* footnote 673 and accompanying paragraph.

⁶³² See General Instruction F (Public Availability) to Form N-PORT.

a. Derivatives Exposure

We are amending Form N-PORT to include a new reporting item for certain funds' derivatives exposure.⁶³³ While the proposal would have required all funds to report their derivatives exposure, the final amendments we are adopting will require only a fund that relies on the limited derivatives user exception in rule 18f-4 to report derivatives exposure information.⁶³⁴ A fund that relies on this exception will have to report: (1) its derivatives exposure; (2) its exposure from currency derivatives that hedge currency risks; and (3) its exposure from interest rate derivatives that hedge interest rate risks. Such a fund also will have to report the number of business days, if any, in excess of the five-business-day remediation period that final rule 18f-4 provides, that the fund's derivatives exposure exceeded 10 percent of its net assets during the reporting period. These reporting requirements are designed to provide information to the Commission to further its ability to monitor compliance with the limited derivatives user exception.

No commenters specifically supported the Commission's proposal to require a fund to report its derivatives exposure data on Form N-PORT.⁶³⁵ Likewise, no commenters specifically opposed this reporting requirement.⁶³⁶ However, some commenters stated that public disclosure of a fund's aggregate derivatives exposure would not serve investor protection purposes because such information could be misleading and would be unnecessary, as individual portfolio holdings data already provide similar but more useful information.⁶³⁷ We agree that the proposed derivatives exposure reporting requirement would not have permitted investors or other market

⁶³³ Item B.9 of Form N-PORT; *see also* amendments to General Instruction E to Form N-PORT (adding a new definition for "derivatives exposure," as defined in rule 18f-4(a)). A fund's derivatives exposure, which is expressed as a percentage of the fund's net assets, is computed in U.S. dollars.

⁶³⁴ *See* proposed Item B.9 of Form N-PORT.

⁶³⁵ Some commenters generally agreed with, or did not object to, reporting the proposed derivatives information to the Commission, but did not specifically support the derivatives exposure reporting item. *See* ICI Comment Letter; J.P. Morgan Comment Letter; Putnam Comment Letter.

⁶³⁶ Although one commenter broadly objected to all new reporting requirements, it did not discuss or object to any specific requirements. *See* ISDA Comment Letter.

⁶³⁷ *See, e.g.,* ICI Comment Letter; Putnam Comment Letter.

participants to determine the purposes for which a fund uses derivatives, including whether derivatives are being used for hedging purposes. We also recognize that funds currently publicly disclose information regarding their derivatives positions on Form N-PORT and elsewhere.⁶³⁸ In light of these considerations, we are not adopting the requirement for all funds to report derivatives exposure on Form N-PORT. However, because the limited derivatives user exception in final rule 18f-4 will require funds relying on the exception to limit their derivatives exposure to 10% or less of the value of their net assets, we are adopting a derivatives exposure reporting requirement for these funds to facilitate the Commission's ability to monitor compliance with the exception.⁶³⁹

The specific exposure information we are requiring funds to report reflects this regulatory purpose. While the proposal would have required a fund to provide its exposure from derivatives instruments and exposure from short sales separately, as distinct reporting items, we are not requiring limited derivatives users to break out these separate components of exposure.⁶⁴⁰ We can perform our oversight function without requiring funds to separately report their exposure from derivatives instruments and shorts sales.⁶⁴¹ Conversely, because the final rule will permit a fund that relies on the limited derivatives user exception to exclude certain currency and interest rate hedging transactions from the 10% derivatives exposure threshold associated with the exception, we are adopting corresponding reporting requirements that will require funds to separately report the levels of exposure they have obtained from these currency and interest rate hedging transactions. This information will help support our ability to monitor funds' reliance on

⁶³⁸ See *infra* footnote 654 and accompanying text.

⁶³⁹ See Proposing Release, *supra* footnote 1, n.364 and accompanying text. As proposed, a fund also will have to indicate whether it is a limited derivatives user on Form N-CEN. See *infra* section II.G.3.

⁶⁴⁰ See proposed Items B.9.a.i (exposure from derivative instruments that involve future payment obligations) and B.9.a.ii (exposure from short sales).

⁶⁴¹ See *supra* footnote 633.

the exception. For each of the reporting items we are adopting, a fund will be required to provide its exposure as a percentage of the fund's net asset value as of the end of the reporting period.⁶⁴²

One commenter recommended allowing a fund to report derivatives exposure based on either a net notional basis (*e.g.*, allowing netting of long and short positions) or mark-to-market basis, stating that either of these methods provides a more accurate measure of the fund's derivatives exposure.⁶⁴³ These suggestions, however, would result in funds reporting derivatives exposure figures that deviate from the manner in which funds are required to calculate derivatives exposure under rule 18f-4. As a result, this would limit the Commission's ability to monitor funds' use of derivatives for oversight purposes. Accordingly, we are not making the requested change, and the final amendments to Form N-PORT will require a fund that is a limited derivatives user to report its derivatives exposure on a gross notional basis, as proposed.⁶⁴⁴

In a change from the proposal, we are also adopting a requirement for funds that are limited derivatives users to report certain information regarding times during which these funds' derivatives exposure exceeds 10% of their net assets.⁶⁴⁵ Final rule 18f-4 includes remediation provisions that address circumstances in which funds that are relying on the limited derivatives user exception have derivatives exposure that exceeds 10% of their net assets.⁶⁴⁶ These provisions incorporate a five-business-day period for the fund to reduce its exposure before it must provide a written report to the fund's board of directors on the fund's plan to reduce its exposure. If a fund relying on that exception has derivatives exposure exceeding 10% of the fund's net assets, and this exceedance persists beyond the five-business-day period that rule 18f-4 provides for remediation, the fund will have to report the number of business days (beyond the five-business-day period) that its derivatives exposure exceeded 10% of net assets during the

⁶⁴² Item B.9; *see also* General Instruction A to Form N-PORT.

⁶⁴³ Fidelity Comment Letter.

⁶⁴⁴ Item B.9.a.; *see also* rule 18f-4(a) (defining "derivatives exposure").

⁶⁴⁵ *See* Item B.9.d of Form N-PORT.

⁶⁴⁶ *See* rule 18f-4(c)(4); *supra* section III.E.4.

reporting period. This information also is designed to assist the Commission in monitoring compliance with the limited derivatives user exception.

In another change, derivatives exposure information reported in response to Item B.9 of Form N-PORT will not be made publicly available, as had been proposed.⁶⁴⁷ The majority of commenters that addressed this aspect of the proposal urged the Commission to make this information non-public.⁶⁴⁸ Other commenters supported (or stated they did not oppose) public disclosure of derivatives exposure, but did not provide detailed justification for this support.⁶⁴⁹

Commenters that opposed public disclosure of a fund's gross notional derivatives exposure expressed concern that this information could confuse or mislead investors who may not understand the relevance of or context for the data.⁶⁵⁰ One commenter stated that "derivatives exposure" would include notional amounts of transactions that investors may not traditionally consider to be "derivatives."⁶⁵¹ Several commenters stated that public disclosure of this information could cause some investors or third-party analysts to incorrectly gauge the riskiness of (and amount of leverage used by) funds, particularly since Form N-PORT is not designed to include qualitative information that could provide context for the data.⁶⁵² Commenters also asserted that publicly disclosing this information would not be necessary to provide additional transparency to investors and other market participants because funds already publicly disclose information about their derivatives positions.⁶⁵³ In particular, several commenters observed that: (1) funds currently report their full portfolio schedules on Form N-PORT in a structured data format; (2) a fund's financial statements contain a variety of derivatives-related information

⁶⁴⁷ Proposing Release *supra* footnote 1, at n.363 and accompanying text.

⁶⁴⁸ *See, e.g.*, Dechert Comment Letter I; Invesco Comment Letter; ICI Comment Letter; AQR Comment Letter I; Capital Group Comment Letter.

⁶⁴⁹ J.P. Morgan Comment Letter; SIFMA AMG Comment Letter; T. Rowe Comment Letter.

⁶⁵⁰ *See, e.g.*, Capital Group Comment Letter; Eaton Vance Comment Letter; MFA Comment Letter; PIMCO Comment Letter.

⁶⁵¹ Dechert Comment Letter I.

⁶⁵² *See, e.g.*, Invesco Comment Letter; ICI Comment Letter; Putnam Comment Letter.

⁶⁵³ *See, e.g.*, ICI Comment Letter; AQR Comment Letter I; Capital Group Comment Letter; Invesco Comment Letter.

(including notional amount information organized by category of derivative instrument); and (3) some funds provide disclosure about their use of derivatives in shareholder reports.⁶⁵⁴ Some commenters also stated that public disclosure of derivatives exposure amounts, even if disclosed on a delayed basis, could reveal proprietary information to fund competitors.⁶⁵⁵ Two commenters stated that the delayed public availability of exposure information that funds report, while protective of funds, may limit its utility to investors.⁶⁵⁶

We are not requiring derivatives exposure information to be publicly available. Section 45(a) requires information in reports filed with the Commission pursuant to the Investment Company Act to be made public unless we find that public disclosure is neither necessary nor appropriate in the public interest or for the protection of investors.⁶⁵⁷ Because we are not, as proposed, requiring all funds to report derivatives exposure information, but are instead imposing the requirement only on funds that are limited derivatives users, making this information public is unlikely to provide the market-wide insight into the levels of funds' derivatives exposure to investors and other market participants we had initially anticipated.⁶⁵⁸ Moreover, making the derivatives exposure data that funds that are limited derivatives users must report publicly available could cause investors to believe that these reporting funds (which do not use derivatives extensively or largely use them for limited hedging purposes), are riskier than funds that use derivatives to a greater extent but are not required to report their exposure information. In light of commenters' concerns, and given the regulatory purpose of the reporting requirement we are adopting, we find that public disclosure of this information is neither necessary nor appropriate in the public interest or for the protection of investors.

⁶⁵⁴ Dechert Comment Letter I; Invesco Comment Letter; T. Rowe Comment Letter.

⁶⁵⁵ Dechert Comment Letter I; ICI Comment Letter; MFA Comment Letter.

⁶⁵⁶ Dechert Comment Letter I; MFA/AIMA Comment Letter.

⁶⁵⁷ Section 45(a) of the Investment Company Act.

⁶⁵⁸ Proposing Release *supra* footnote 1, footnote 363 and accompanying text.

b. VaR Information

Form N-PORT will include a new reporting item related to the VaR tests we are adopting, with certain modifications from the proposal discussed below.⁶⁵⁹ As proposed, the new disclosure item will apply to funds that are subject to the VaR-based limit on fund leverage risk during the relevant reporting period.

With the exception of one commenter that broadly opposed all new proposed reporting requirements on the grounds that they increase burdens on funds, no commenter opposed providing the proposed VaR information to the Commission on Form N-PORT.⁶⁶⁰ Multiple commenters, however, opposed making certain information reported in response to the proposed VaR disclosure items publicly available.⁶⁶¹

Median VaR and Designated Reference Portfolio Information

Funds will report their median daily VaR for the monthly reporting period, as proposed. Also as proposed, a fund subject to the relative VaR test during the reporting period will report, as applicable, the name of the fund's designated index and its index identifier. This item reflects a conforming change from the proposal, in light of modifications to the proposed relative VaR test, to require a statement that the fund's designated reference portfolio is the fund's securities portfolio, if applicable. Funds also will report their median daily VaR ratio for the reporting period, as the proposal would have required.⁶⁶² The requirement for a fund to report median daily VaR (and, for a fund that is subject to the relative VaR test, the fund's median VaR ratio) is designed to help the Commission assess compliance with the rule.⁶⁶³ These data points will also facilitate the Commission's monitoring efforts. For example, these data points can be used to

⁶⁵⁹ Item B.10 of Form N-PORT.

⁶⁶⁰ See ISDA Comment Letter.

⁶⁶¹ See, e.g., ISDA Comment Letter; Dechert Comment Letter I; ICI Comment Letter; AQR Comment Letter I; BlackRock Comment Letter.

⁶⁶² In a conforming change to reflect modifications we are making to proposed rule 18f-4, this reporting item describes a fund's median VaR ratio as a percentage of the VaR of the fund's designated reference portfolio instead of as a percentage of the VaR of the fund's designated reference index (as proposed).

⁶⁶³ See Proposing Release, *supra* footnote 1, at section II.H.1.b.

identify changes in a fund's VaR over time, and trends involving a single fund or group of funds regarding their VaRs. The requirement that a fund report information about its designated reference portfolio is designed to help analyze whether funds are using designated reference portfolios that meet the rule's requirements, and to assess any trends in the designated reference portfolios that funds select.

Although several commenters supported (or generally did not oppose) public reporting about a fund's designated index on Form N-PORT,⁶⁶⁴ commenters largely objected to making information reported in response to the proposed VaR disclosure items publicly available.⁶⁶⁵ Many commenters expressed concern that, while the Commission may expect and understand divergence across VaR models, VaR is a complex measure that many investors do not have the expertise or experience to understand.⁶⁶⁶ One commenter stated that because investors trying to compare funds may misunderstand VaR information, funds could be incentivized to report data designed to appear less risky.⁶⁶⁷ Although the proposed VaR information would have been made publicly available on a delayed basis, several commenters stated that publicly disclosing VaR information could reveal proprietary information about a fund's risk management tools.⁶⁶⁸ Some generally questioned the investor protection benefits of making VaR data public.⁶⁶⁹

After considering these comments, we are making two modifications to the proposal. First, we are not requiring a fund's median VaR information (its median VaR, and its median VaR ratio for funds subject to the relative VaR test) to be publicly available, as had been proposed.⁶⁷⁰ While we recognize that this information could help some market participants

⁶⁶⁴ Putnam Comment Letter; SIFMA AMG Comment Letter; Invesco Comment Letter.

⁶⁶⁵ *See supra* footnote 661.

⁶⁶⁶ *See, e.g.*, Dechert Comment Letter I; Invesco Comment Letter; ICI Comment Letter; AQR Comment Letter I; J.P. Morgan Comment Letter.

⁶⁶⁷ Eaton Vance Comment Letter.

⁶⁶⁸ Dechert Comment Letter I; MFA/AIMA Comment Letter.

⁶⁶⁹ Dechert Comment Letter I; J.P. Morgan Comment Letter.

⁶⁷⁰ See General Instruction F of Form N-PORT (stating that the SEC does not intend to make public the information reported with respect to a fund's median daily VaR (Item B.10.a) and Median VaR Ratio (Item B.10.b.iii)).

assess the effect of derivatives use on funds that have similar strategies but different VaRs, many investors may not have the expertise or experience to understand VaR and could misinterpret VaR figures, especially when comparing funds. Moreover, sophisticated investors and other market participants who may be less likely to misinterpret VaR figures can analyze a fund's portfolio holdings, which are publicly available in a structured data format on Form N-PORT, to roughly estimate a fund's VaR.⁶⁷¹ Taking all of these considerations into account, we find that public disclosure of this information is neither necessary nor appropriate in the public interest or for the protection of investors.⁶⁷² We are, however, requiring information about a fund's designated reference portfolio to be made publicly available, as proposed. Commenters did not object to making this information publicly available, and to the extent that investors and other market participants wish to compare a fund's performance relative to the performance of its designated index, the information regarding a fund's designated reference portfolio will facilitate this analysis.

Second, while the proposal would have required funds to report their highest daily VaR (and for funds that use the relative VaR test, their highest daily VaR ratio) and these measures' corresponding dates, the Form N-PORT amendments that we are adopting do not include this requirement.⁶⁷³ After considering comments, we believe that a fund's median VaR data more effectively portrays a fund's use of derivatives than the highest VaR figures. The median VaR data will be based on multiple inputs, whereas the high VaR figures would represent the fund's VaR on a single day during the period, which could have been an outlier that is not reflective of fund's typical VaR levels. Although information about a fund's highest VaR or VaR ratio also could facilitate monitoring by the Commission for compliance with the final rule, we believe that the requirement for funds to report VaR breaches on Form N-RN will provide sufficient information for this purpose. In addition, the elimination of these proposed reporting items will

⁶⁷¹ Cf. Dechert Comment Letter I; Invesco Comment Letter; T. Rowe Comment Letter.

⁶⁷² See *supra* footnote 657.

⁶⁷³ Proposed Items B.10.a, b, and d.iii-iv of Form N-PORT.

offset the burdens associated with new Form N-PORT reporting items that we believe provide higher information value, such as a fund's median daily VaR and median daily VaR ratio.

Backtesting Results

As proposed, a fund will have to report the number of exceptions it identified during the reporting period arising from backtesting the fund's VaR calculation model.⁶⁷⁴ This requirement is designed to help analyze whether a fund's VaR model is effectively taking into account and incorporating all significant, identifiable market risk factors associated with a fund's investments, and will assist the Commission in monitoring funds' compliance with the VaR tests.

While the Commission proposed that this backtesting information would be publicly available, many commenters opposed making this information public due to concerns that investors would misunderstand or ascribe inappropriate significance to the backtesting exceptions.⁶⁷⁵ These commenters suggested that investors might think a fund that reports backtesting exceptions is not complying with its leverage limits, or presents more compliance and leverage risk than it actually does.⁶⁷⁶ The Proposing Release stated that funds would be expected to experience backtesting exceptions approximately 2.5 times a year and that more (or fewer) exceptions could suggest issues with the VaR model. Commenters expressed concern that while backtesting exceptions would not necessarily warrant investor concern, an investor may not have the experience or relevant background to understand this.⁶⁷⁷ Some commenters suggested that public disclosure of the backtesting exceptions might confuse investors about the risks associated with a fund's use of derivatives unless a detailed contextual explanation regarding the fund's choice and application of its VaR limit were also provided, which Form N-PORT is not designed to provide.⁶⁷⁸

⁶⁷⁴ Item B.10.c of Form N-PORT; *see also* Proposing Release, *supra* footnote 1, at n.370.

⁶⁷⁵ *See, e.g.*, Dechert Comment Letter I; ICI Comment Letter; BlackRock Comment Letter; Eaton Vance Comment Letter; MFA Comment Letter.

⁶⁷⁶ *See, e.g.*, Dechert Comment Letter I; MFA Comment Letter.

⁶⁷⁷ *See* Proposing Release, *supra* footnote 1, at n.150 and accompanying text; *see also* BlackRock Comment Letter; Capital Group Comment Letter; ICI Comment Letter.

⁶⁷⁸ Capital Group Comment Letter; BlackRock Comment Letter; Eaton Vance Comment Letter.

In a change from the proposal, and after consideration of these comments, we are not requiring the number of a fund's backtesting exceptions to be made publicly available.⁶⁷⁹ This reporting requirement is designed to allow the Commission to assess the adequacy of a fund's VaR model. Taking into account the concerns commenters raised and the purpose of this reporting requirement, we believe that public disclosure of this information is neither necessary nor appropriate in the public interest or for the protection of investors

2. Amendments to Current Reporting Requirements

We are adopting new current reporting requirements for certain funds that are relying on rule 18f-4. Specifically, we are re-titling Form N-LIQUID as Form N-RN and amending this form to include new reporting events for funds that are subject to the VaR-based limit on fund leverage risk.⁶⁸⁰ These funds will be required to determine their compliance with the applicable VaR test on at least a daily basis.⁶⁸¹ We are requiring these funds to file Form N-RN to report information about VaR test breaches under certain circumstances. We are adopting these requirements substantially as proposed, with conforming amendments to reflect changes to the modified VaR requirements that we adopting.

If the portfolio VaR of a fund subject to the relative VaR test exceeds, as applicable, 200% or 250% of the VaR of its designated reference portfolio for five business days, we are requiring that such a fund report: (1) the dates on which the fund portfolio's VaR exceeded 200% or 250% of the VaR of its designated reference portfolio; (2) the VaR of the fund's portfolio for each of these days; (3) the VaR of its designated reference portfolio for each of these days; (4) as applicable, either the name of the designated index, or a statement that the fund's designated reference portfolio is its securities portfolio; and (5) as applicable, the index identifier for the fund's designated index.⁶⁸² A fund will have to report this information within one business day

⁶⁷⁹ See General Instruction F to Form N-PORT.

⁶⁸⁰ See Parts E-G of Form N-RN.

⁶⁸¹ Rule 18f-4(c)(2).

⁶⁸² See Part E of Form N-RN. This requirement reflects conforming changes to parallel the VaR limits that we are adopting as part of final rule 18f-4. See *supra* sections II.D.2.c. and II.D.3. This

following the fifth business day after the fund has determined that its portfolio VaR exceeds, as applicable, 200% or 250% of its designated reference portfolio VaR.⁶⁸³ Such a fund also will then have to file a second report on Form N-RN when it is back in compliance with the relative VaR test.⁶⁸⁴

Similarly, if the portfolio VaR of a fund subject to the absolute VaR test were to exceed, as applicable, 20% or 25% of the value of the fund's net assets for five business days, we are requiring that such a fund report: (1) the dates on which the fund portfolio's VaR exceeded 20% or 25% of the value of its net assets; (2) the VaR of the fund's portfolio for each of these days; and (3) the value of the fund's net assets for each of these days.⁶⁸⁵ Such a fund will have to report this information within the same time frame as would be required under the parallel reporting requirements for funds that are subject to the relative VaR test, and also will have to file a report on Form N-RN when it is back in compliance with the absolute VaR test.⁶⁸⁶

Currently, only registered open-end funds (excluding money market funds) are required to file reports on Form N-LIQUID (to be re-titled as Form N-RN).⁶⁸⁷ As proposed, we are

requirement also reflects a conforming change to reflect the final time-frame for VaR test remediation (five business days as opposed to three business days, as proposed) that we are adopting. *See supra* footnote 460 and accompanying text.

⁶⁸³ For example, if the fund were to determine, on the evening of Monday, June 1, that its portfolio VaR exceeded 200% of the fund's designated reference portfolio VaR, and this exceedance were to persist through Tuesday (June 2), Wednesday (June 3), Thursday (June 4), Friday (June 5), and Monday (June 8), the fund would file Form N-RN on Tuesday, June 9 (because five business days following the determination on June 1 is June 8, and 1 business day following June 8 is June 9). If the exceedance were to still persist on June 9 (the date that the fund would file Form N-RN), the fund's report on Form N-RN would provide the required information elements for June 1, 2, 3, 4, 5, 8 and 9.

⁶⁸⁴ *See* Part G of Form N-RN. The report will include the dates on which the fund was not in compliance with the VaR test, and the current VaR of the fund's portfolio on the date the fund files the report.

⁶⁸⁵ *See* Part F of Form N-RN. This requirement reflects conforming changes to parallel proposed requirements to reflect the VaR limits that we are adopting as part of final rule 18f-4. *See* proposed Part F of Form N-RN; *see also supra* footnote 402 and accompanying text. This requirement also reflects a conforming change to the proposed requirement to reflect the final time-frame for VaR test remediation that we are adopting (five business days as opposed to three business days, as proposed). *See supra* footnote 460 and accompanying text.

⁶⁸⁶ A fund may provide explanatory information about any information reported in response to the form's items. *See* Part H of Form N-RN.

⁶⁸⁷ *See* General Instruction A.(1) to Form N-LIQUID; *see also* rule 30b1-10 [17 CFR 270.30b1-10].

requiring all funds that are subject to rule 18f-4's limit on fund leverage risk to file current reports on Form N-RN regarding VaR test breaches.⁶⁸⁸ The scope of funds that will be subject to the new VaR test breach current reporting requirements of Form N-RN will thus include registered open-end funds, as well as registered closed-end funds and BDCs. In addition to extending the scope of funds required to respond to Form N-RN, we are amending the general instructions to the form to reflect the expanded scope and application, as proposed.⁶⁸⁹

Many commenters expressed general support for the proposed Form N-RN reporting requirements as an appropriate adjunct to the rule's remediation provisions, facilitating regulatory monitoring by the Commission.⁶⁹⁰ Conversely, one commenter broadly opposed any new reporting requirements, including on Form N-RN.⁶⁹¹ This commenter stated that the proposed requirements in the aggregate could introduce a substantial additional reporting burden for funds, particularly in the context of volatile market conditions, and that given the board reporting requirements under the proposed remediation provision, imposing additional reporting requirements is unnecessary. Another commenter recommended that the Commission either eliminate the proposed Form N-RN reporting requirement and instead include the proposed Form

⁶⁸⁸ See Form N-RN; *see also* rule 30b1-10 under the Investment Company Act (amended to extend current reporting requirements to registered closed-end funds), and rule 18f-4(c)(7) (requiring all funds that rely on rule 18f-4 and that are subject to its limit on fund leverage risk, which experience an event specified in the parts of Form N-RN titled "Relative VaR Test Breaches," "Absolute VaR Test Breaches," or "Compliance with VaR Test," to file with the Commission a report on Form N-RN within the period and according to the instructions specified in that form).

Because BDCs are regulated, not registered, under the Investment Company Act, they are not subject to rule 30b1-10. A BDC is only required to file on Form N-RN if it elects to rely on rule 18f-4 to enter into derivative transactions, and the BDC experiences an event that rule 18f-4(c)(7) specifies requires a filing on Form N-RN.

⁶⁸⁹ See, e.g., General Instruction A.(1) to Form N-RN (amended to specify that the defined term "registrant" also includes registered closed-end funds and BDCs); General Instruction A.(2) to Form N-RN (amended to extend the scope of application to the new VaR-test-breach-related Items E-G); General Instruction A.(3) to Form N-RN (added to specify that only open-end funds required to comply with rule 22e-4 under the Investment Company Act must report events described in Parts B – D, as applicable, while all funds that rely on rule 18f-4 subject to compliance with rule 18f-4(c)(2)'s limit on fund leverage risk must report events described in Parts E – G, as applicable); and General Instruction F to Form N-RN (amended to specify that the terms used in Parts E – G have the same meaning as in rule 18f-4).

⁶⁹⁰ See, e.g., J.P. Morgan Comment Letter; ICI Comment Letter; Invesco Comment Letter; SIFMA AMG Comment Letter; Nuveen Comment Letter.

⁶⁹¹ ISDA Comment Letter.

N-RN reporting items on Form N-PORT, or extend the remediation period within which a fund must come back into compliance with its VaR to ten business days.⁶⁹² While acknowledging the Commission's need for transparency and information, particularly during times of market stress, this commenter expressed concern that some funds could engage in asset sales to avoid triggering the Form N-RN filing requirement.⁶⁹³

We continue to believe that the amendments to current reporting requirements will be important for the Commission to assess funds' compliance with the VaR tests and to monitor the effects of market stress on funds' leverage risk.⁶⁹⁴ We are requiring funds to provide this information in a current report because we believe that the Commission should be notified promptly when a fund is out of compliance with the VaR-based limit on fund leverage risk, which could indicate that a fund is experiencing heightened risks as a result of the fund's use of derivatives transactions. VaR test breaches could indicate that a fund is using derivatives transactions to leverage the fund's portfolio, magnifying its potential for losses and significant payments of fund assets to derivatives counterparties. Such breaches also could indicate market events that are drivers of potential derivatives risks or other risks across the fund industry. Either of these scenarios—increased fund-specific risks, or market events that affect funds' risks broadly—may, depending on the facts and circumstances, require attention by the Commission. Relying on reporting to the fund's board alone and without a report to the Commission, as one commenter suggested, would not further these objectives.

The new current reporting requirement is designed to provide the Commission with current information regarding potential increased risks and stress events (as opposed to delayed reporting on Form N-PORT). The one-business-day time frame for this Form N-RN reporting—after a fund has been out of compliance with the VaR test for five business days—is designed to provide an appropriately early notification to the Commission of potential heightened risks,

⁶⁹² Dechert Comment Letter III.

⁶⁹³ *Id.*; see also *supra* footnote 484.

⁶⁹⁴ See Proposing Release *supra* footnote 1, at section II.H.2.

while at the same time providing sufficient time for a fund to compile and file its report on Form N-RN. This time frame is also consistent with the current required timing for reporting other events on current Form N-LIQUID.⁶⁹⁵ A fund that breached its VaR test and has filed an initial report on Form N-RN is not required to file additional reports while it is working to come back into compliance because the requirement that a fund file a report when it comes back into compliance allows the Commission to monitor the length of time that a fund is out of compliance. However, we expect that Commission staff will engage with the fund about its plans to come back into compliance, among other monitoring activities, as discussed above.⁶⁹⁶ Although one commenter suggested that a requirement to file a current report could “create[] [a] sense of urgency and may cause forced selling not in the best interest of the fund,” because a fund that is promptly coming back into compliance with the applicable VaR test must do so in a manner that is in the best interests of the fund and its shareholders, a fund engaging in “fire sales” to avoid filing a report on Form N-RN would violate the final rule.⁶⁹⁷

As proposed, funds’ reports on Form N-RN regarding VaR test breaches (like their reports on this form regarding liquidity-related items) will be non-public, because we believe that public disclosure of this information is neither necessary nor appropriate in the public interest or for the protection of investors.⁶⁹⁸ Information about VaR breaches that funds report on Form N-RN will provide important information to the Commission for regulatory purposes. Public disclosure is not required for these regulatory purposes, and we believe that adverse effects might arise from real-time public disclosure of a fund’s VaR test breaches. For example, publicly disclosing this information could confuse investors and lead them and other market participants to make incorrect assumptions about whether a fund has suffered losses (or will imminently suffer losses) or about a fund’s relative riskiness. This could have potential adverse effects for

⁶⁹⁵ See General Instruction A of current Form N-LIQUID (to be re-titled as Form N-RN).

⁶⁹⁶ See *supra* section II.D.6.b.

⁶⁹⁷ See Dechert Comment Letter III; see also rule 18f-4(2)(c)(ii); *supra* section II.D.6.b.

⁶⁹⁸ See General Instruction A.(1) to Form N-RN; see also section 45(a) of the Investment Company Act.

funds if investors redeem or sell fund shares as a result, and funds' remaining investors could be adversely affected as well. The only commenter to address this aspect of the proposal agreed that VaR information disclosed on Form N-RN should not be made public.⁶⁹⁹ No commenters opposed the Commission's proposal to make VaR information reported on Form N-RN non-public.

3. Amendments to Form N-CEN

Form N-CEN currently includes an item that requires a fund to indicate—in a manner similar to “checking a box”—whether the fund has relied on certain Investment Company Act rules during the reporting period.⁷⁰⁰ As proposed, we are amending this item to require a fund to identify whether it relied on rule 18f-4 during the reporting period.⁷⁰¹ We are also adopting amendments, largely as proposed, requiring a fund to identify whether it relied on any of the exceptions from various requirements under the rule, specifically:

- Whether the fund is a limited derivatives user excepted from the rule's program requirement and VaR-based limit on fund leverage risk;⁷⁰² or
- Whether the fund is a leveraged/inverse fund that will be excepted from the limit on fund leverage risk.⁷⁰³

In addition, as proposed, a fund will have to identify whether it has entered into reverse repurchase agreements or similar financing transactions pursuant to the rule. In a change from the proposal, a fund must identify whether it entered into such transactions either under: (1) the provision of rule 18f-4 that requires compliance with section 18's asset coverage requirements; or (2) the provision that allows funds to treat these transactions as derivatives transactions for all

⁶⁹⁹ AQR Comment Letter I.

⁷⁰⁰ See Item C.7 of Form N-CEN.

⁷⁰¹ See Item C.7.n of Form N-CEN.

⁷⁰² See Item C.7.n.i of Form N-CEN.

⁷⁰³ See Item C.7.n.ii of Form N-CEN. This requirement reflects conforming changes to remove references to the proposed sales practices rules, which we are not adopting, and instead reference the provision in the final rule addressing leveraged/inverse funds. See rule 18f-4(c)(5).

purposes under the final rule.⁷⁰⁴ As proposed, a fund also will have to identify whether it has entered into unfunded commitment agreements under rule 18f-4.⁷⁰⁵ Finally, we are including a new reporting item designed to conform to other changes being adopted in final rule 18f-4 that will require a fund to identify whether it is relying on the provision of rule 18f-4 that addresses investments in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle.⁷⁰⁶ This information will assist the Commission with its oversight functions by allowing Commission staff to identify which funds were excepted from certain of the rule's provisions or relied on the rule's provisions regarding reverse repurchase agreements, unfunded commitment agreements, or funds' investment in when-issued, forward-settling, and non-standard settlement cycle securities. All new information reported on Form N-CEN pursuant to this rulemaking will be publicly available, as proposed.

With the exception of one commenter that broadly opposed any new form reporting requirements, including reporting on Form N-CEN, the Commission received no comments opposing the proposed reporting requirements on Form N-CEN.⁷⁰⁷ One commenter suggested that the Commission amend Form N-CEN to include a new reporting item requiring a fund to affirmatively identify whether it has adopted and implemented a derivatives risk management program and is subject to a VaR-based limit on leverage risk under rule 18f-4.⁷⁰⁸ We believe that the requirement we are adopting for a fund to indicate on Form N-CEN that it is relying on rule 18f-4 effectuates this recommendation. One commenter supported making the new Form N-CEN

⁷⁰⁴ See Items C.7.n.iii-iv of Form N-CEN. These requirements reflect conforming changes to the proposed item to create two separate reporting items, so a fund that enters into reverse repurchase agreements or similar financing transactions under final rule 18f-4 must identify the specific provision on which it is relying, *i.e.*, rule 18f-4(d)(1)(i) or rule 18f-4(d)(1)(ii).

⁷⁰⁵ See Item C.7.n.v of Form N-CEN.

⁷⁰⁶ See Item C.7.n.vi of Form N-CEN. This reporting item corresponds with new rule 18f-4(f), which addresses investments in when-issued and forward-settling securities.

In a change from the proposal, we are modifying Part A of Form N-CEN (General Information) to include fields for a registrant's name, and series name, if applicable. This change is designed to facilitate the filing and review process.

⁷⁰⁷ ISDA Comment Letter.

⁷⁰⁸ Invesco Comment Letter.

disclosures publicly-available, and no commenters opposed public availability of the new disclosures.⁷⁰⁹

H. Reverse Repurchase Agreements

As proposed, rule 18f-4 will permit funds to enter into reverse repurchase agreements or similar financing transactions so long as they meet the relevant asset coverage requirements of section 18.⁷¹⁰ However, in a change from the proposal, the final rule also will allow funds the option to treat reverse repurchase agreements or similar financing transactions as derivatives transactions, rather than including such transactions in the fund's asset coverage calculations.⁷¹¹ This change is designed to provide a fund flexibility to choose the approach that is best suited to its investment strategy or operational needs, while still addressing section 18's asset sufficiency and leverage concerns.⁷¹²

As discussed in the Proposing Release, funds may engage in certain transactions that may involve senior securities primarily as a means of obtaining financing.⁷¹³ A common method of obtaining financing is through the use of reverse repurchase agreements,⁷¹⁴ which are economically equivalent to secured borrowings.⁷¹⁵ Accordingly, the Commission proposed to

⁷⁰⁹ J.P. Morgan Comment Letter.

⁷¹⁰ Rule 18f-4(d)(1)(i). Among other things, section 18 prescribes the required amount of asset coverage for a fund's senior securities, and provides certain consequences for a fund that fails to maintain this amount. *See, e.g.*, section 18(a) (restrictions on dividend issuance).

⁷¹¹ Rule 18f-4(d)(1)(ii).

⁷¹² Rule 18f-4(d) does not provide any exemptions from the requirements of section 61 for BDCs because that section does not limit a BDC's ability to engage in reverse repurchase or similar transactions in parity with other senior security transactions permitted under that section, and we do not believe that BDCs use reverse repurchase agreements or similar financing transactions to such an extent that they would seek or require the additional flexibility to treat these transactions as derivatives transactions under the final rule.

⁷¹³ For example, open-end funds are permitted to borrow money from a bank, provided they maintain a 300% asset coverage ratio. *See* section 18(f)(1) of the Investment Company Act.

⁷¹⁴ In a reverse repurchase agreement, a fund transfers a security to another party in return for a percentage of the value of the security. At an agreed-upon future date, the fund repurchases the transferred security by paying an amount equal to the proceeds of the initial sale transaction plus interest. *See* Release 10666, *supra* footnote 14, at "Reverse Repurchase Agreements" discussion (stating that a reverse repurchase agreement may not have an agreed-upon repurchase date, and in that case the agreement would be treated as if it were reestablished each day).

⁷¹⁵ *See, e.g.*, Office of Financial Research, *Reference Guide to U.S. Repo and Securities Lending Markets* (Sept. 9, 2015), available at <https://www.financialresearch.gov/working->

allow a fund to enter into reverse repurchase agreements and similar financing transactions if it treats them as economically equivalent to bank borrowings or other indebtedness subject to the full asset coverage requirements of section 18, and combines the aggregate amount of indebtedness associated with reverse repurchase agreements and other similar financing transactions with bank borrowings and other senior securities representing indebtedness when calculating compliance with section 18's asset coverage ratios.⁷¹⁶

Commenters generally agreed that reverse repurchase agreements are economically a form of secured borrowing.⁷¹⁷ Nevertheless, some commenters urged that we provide additional flexibility for funds to engage in these transactions because subjecting them to the Act's asset coverage requirements as proposed would limit a fund's use of reverse repurchase agreements and similar financing transactions relative to current levels permitted under Release 10666.⁷¹⁸ Several commenters stated that reverse repurchase agreements are often simpler and less expensive to enter into than other borrowings, and have bankruptcy benefits.⁷¹⁹ One commenter was concerned that it would be operationally challenging to include reverse repurchases when calculating compliance with the 300% asset coverage test because the transactions are so quickly entered and exited.⁷²⁰ Some commenters also suggested that the proposed approach would unnecessarily hamper the investment strategies of certain funds, with two commenters focusing on closed-end funds in particular.⁷²¹

[papers/files/OFRwp-2015-17_Reference-Guide-to-U.S.-Repo-and-Securities-Lending-Markets.pdf](#).

⁷¹⁶ Proposed rule 18f-4(d).

⁷¹⁷ *See, e.g.*, Nuveen Comment Letter; Guggenheim Comment Letter.

⁷¹⁸ *See, e.g.*, NYC Bar Comment Letter; ICI Comment Letter; BlackRock Comment Letter; Guggenheim Comment Letter; PIMCO Comment Letter.

Under the approach established in Release 10666, a fund could enter into reverse repurchase agreements so long as it segregated assets equal to the fund's repurchase obligations, or effectively up to a 200% asset coverage ratio. Under the proposal, reverse repurchase agreements would be combined with other borrowings, subject to a total asset coverage limit of 300% in the case of open-end funds. This would have the effect of reducing the maximum amount that a fund could borrow using reverse repurchase agreements relative to the approach under Release 10666.

⁷¹⁹ *See, e.g.*, Dechert Comment Letter I; Guggenheim Comment Letter; ICI Comment Letter.

⁷²⁰ *See, e.g.*, Guggenheim Comment Letter.

⁷²¹ *See, e.g.*, ICI Comment Letter; Blackrock Comment Letter; PIMCO Comment Letter.

Commenters suggested alternatives to the Commission’s proposed treatment of reverse repurchase agreements. They generally agreed that the current regulation of reverse repurchase agreements under an asset segregation framework has been effective.⁷²² A number of commenters recommended retaining the current regulatory framework under which funds segregate liquid assets in connection with reverse repurchase agreements rather than complying with section 18’s asset coverage requirements.⁷²³ Commenters also suggested allowing funds the option to use either the current asset segregation approach, or the proposed approach to requiring compliance with section 18’s asset coverage requirements for reverse repurchase agreements.⁷²⁴ Several commenters recommended that we adopt a modified asset segregation approach that limits segregated assets to assets classified as highly or moderately liquid under rule 22e-4.⁷²⁵ Another commenter suggested that if we do not retain the existing asset segregation framework, we should allow funds to treat reverse repurchase agreements as derivatives transactions under the final rule.⁷²⁶ One commenter also observed that a fund could create exactly the same economics of a reverse repurchase agreement with a total return swap, which is treated as a derivatives transaction under the rule.⁷²⁷

Reverse repurchase agreements and other similar financing transactions have the effect of allowing a fund to obtain additional cash that can be used for investment purposes or to finance fund assets. As such, they achieve effectively identical results to a bank borrowing or other borrowing.⁷²⁸ Accordingly, we believe it is appropriate to allow funds to engage in these

⁷²² See, e.g., ICI Comment Letter; NYC Bar Comment Letter.

⁷²³ See, e.g., NYC Bar Comment Letter, Guggenheim Comment Letter; Dechert Comment Letter I; BlackRock Comment Letter; SIFMA AMG Comment Letter.

⁷²⁴ See, e.g., Guggenheim Comment Letter; Dechert Comment Letter I; SIFMA AMG Comment Letter; PIMCO Comment Letter.

⁷²⁵ See, e.g., ICI Comment Letter; BlackRock Comment Letter; Guggenheim Comment Letter; PIMCO Comment Letter; SIFMA AMG Comment Letter.

⁷²⁶ NYC Bar Comment Letter. The Commission requested comment regarding whether to treat reverse repurchase agreements and similar financing transactions as derivatives transactions in the Proposing Release.

⁷²⁷ Nuveen Comment Letter.

⁷²⁸ Another example of a similar financing transaction for purposes of this provision would be a fund’s purchase of a security on margin.

transactions to the same degree as borrowings under the Act, and to treat them equally. For example, this would have the effect of permitting an open-end fund to obtain financing by borrowing from a bank, engaging in a reverse repurchase agreement, or any combination thereof, so long as all sources of financing are included when calculating the fund's asset coverage ratio.⁷²⁹ The final rule therefore will allow funds to use reverse repurchase agreements up to the Act's limits on borrowings without incurring the costs and burdens of instituting a derivatives risk management program under the final rule.⁷³⁰

We are also persuaded that reverse repurchase agreements and similar financing transactions, like derivatives transactions, may provide an efficient and cost-effective form of financing or leverage. When a fund engages in these transactions to borrow beyond what the Act allows under section 18, however, we believe that the same concerns that prompted our adoption of the derivatives risk management program requirement and other conditions of rule 18f-4 may arise. We also appreciate that other types of transactions that would qualify as derivatives transactions under the proposed rule, such as total return swaps, can achieve economically similar results to reverse repurchase agreements. That is, a total return swap produces an exposure and economic return substantially equal to the exposure and economic return a fund could achieve by borrowing money from the counterparty—including through a reverse repurchase agreement—in order to purchase the swap's reference assets. While reverse

⁷²⁹ Section 18 states that certain borrowings that are made for temporary purposes (less than 60 days) and that do not exceed 5% of the total assets of the issuer at the time when the loan is made (temporary loans) are not senior securities for purposes of certain paragraphs in section 18. As the Commission noted in Release 10666, reverse repurchase agreements and similar financing transactions could be designed to appear to fall within the temporary loans exception, and then could be "rolled-over," perhaps indefinitely, with such short-term transactions being entered into, closed out, and later re-entered. If substantially similar financing arrangements were being "rolled over" in any manner for a total period of 60 days or more, we would treat the later transactions as renewals of the earlier ones, and all such transactions would fall outside the exclusion for temporary loans.

⁷³⁰ Under this asset coverage option, reverse repurchase agreements and similar financing transactions will not be included in calculating a fund's derivatives exposure under the limited derivatives user provisions of the final rule. However, if a fund does not qualify as a limited derivatives user due to its other investment activity, any portfolio leveraging effect of reverse repurchase agreements or similar financing transactions will be included and restricted through the VaR-based limit on fund leverage risk. This is because the VaR tests estimate a fund's risk of loss taking into account all of its investments, including the proceeds of reverse repurchase agreements and investments the fund purchased with those proceeds.

repurchase agreements may not be traditionally seen as “derivatives,” they were one of the specific types of transactions that were addressed in Release 10666, in light of the leverage and asset sufficiency concerns they may raise. We believe that as part of our re-evaluation of our regulatory scheme with respect to derivatives and similar transactions, we should address the concerns raised by fund use of reverse repurchase agreements in a consistent manner as those posed by derivatives transactions under the rule when a fund engages in these transitions beyond the Act’s asset coverage requirements for borrowings.

Accordingly, the final rule will allow a fund that does not wish to avail itself of the asset coverage treatment of reverse repurchase agreements, to instead choose to treat them as a derivatives transaction for all purposes under the final rule.⁷³¹ In other words, a fund can either choose to limit its reverse repurchase and other similar financing transaction activity to the applicable asset coverage limit of the Act for senior securities representing indebtedness, or it may instead treat them as derivative transactions.⁷³² A fund’s election will apply to all of its reverse repurchase agreements or similar financing transactions so that all such transactions are subject to a consistent treatment under the final rule.⁷³³ For example a fund may not elect to treat reverse repurchase agreements as derivatives transactions under the final rule, while at the same time electing to treat similar financing transactions, such as Tender Offer Bond (“TOB”) financings, like bank borrowings under the final rule’s asset coverage option. Such mixing and matching of transaction types would not be consistent with the final rule.

We recognize that such transactions could have the effect of introducing leverage into a fund’s portfolio if the fund were to use the proceeds of the financing transaction to purchase additional investments. In addition, such transactions impose a requirement to return assets at the

⁷³¹ Rule 18f-4(a) (definition of derivatives transaction).

⁷³² A fund could choose to treat its reverse repurchase agreements as borrowings under the option we are adopting, and also engage in a limited amount of derivatives use under the limited derivatives user exception.

⁷³³ Rule 18f-4(d)(1)(i) and (ii).

termination of the agreement, which can raise section 18 asset sufficiency concerns to the extent the fund needs to sell less-liquid securities at a loss to obtain the necessary assets.

However, we believe that the derivatives risk management program requirement we are adopting in rule 18f-4 is designed to address these concerns. The leverage risks introduced by the use of reverse repurchase agreements will be identified through the funds' VaR calculations and managed through the program. Similarly, any asset sufficiency concerns should be addressed as a liquidity risk or other derivatives risk under the program. Accordingly, the final rule would allow funds to treat reverse repurchase agreements as derivatives transactions if they choose to do so and comply with the other requirements of the final rule.

Allowing a fund to treat reverse repurchase agreements as derivatives transactions will provide additional flexibility for funds to enter into these agreements. This is because, under the final rule, a fund is permitted to have a portfolio VaR up to 200% of the VaR of the fund's designated reference portfolio or up to 20% for funds relying on the absolute VaR test (with higher limits for closed-end funds). Under our historical approach to asset segregation for these transactions, a fund could incur obligations under these transactions equal to 100% of the fund's net assets, after which all of the fund's assets would have been segregated. The approach we are taking under the final rule would provide reasonably comparable flexibility where a fund relies on the relative VaR test because the fund could treat reverse repurchase agreements as derivatives transactions and would be able to use them to increase the fund's VaR up to approximately 200% of the VaR of the fund's designated reference portfolio by reinvesting the reverse repurchase agreement borrowings in the fund's strategy.

The final rule will also require a fund to memorialize on its books and records which option it is using to manage its reverse repurchase agreements and similar financing transactions, and maintain that record for five years.⁷³⁴ These records will provide supporting detail for a fund's corresponding Form N-CEN "check-the-box" representation regarding the rule provision upon which it relied in entering into reverse repurchase agreements and similar financing

⁷³⁴ Rule 18f-4(d)(2).

transactions.⁷³⁵ We believe it is appropriate to require such a record to ensure that our examiners can identify and verify which option the fund is using for these transactions.

The required records also could preserve more-granular detail than the corresponding Form N-CEN representation, depending on the circumstances. For example, if a fund were to switch between the two options multiple times throughout one year, these actions would be memorialized in the fund's books and records, but would not appear on Form N-CEN, which registered funds file annually. We believe that if a fund were to switch between the two options on a dynamic or frequent basis, this may indicate that the fund has not effectively evaluated the appropriate approach. In addition, such frequent switching may indicate gaming or create other evasion concerns. However, a fund could reasonably decide to switch between options if circumstances change or it otherwise reevaluates how it should best treat such transactions. In such a case, this recordkeeping provision requires the fund to maintain a record of its original choice and its switch to the other option for the appropriate period.

As noted above, some commenters suggested that we retain an asset segregation approach for reverse repurchase agreements and similar financing transactions, similar to the approach that the Commission proposed for these and certain other transactions in 2015. We are not persuaded that we should adopt such a separate and distinct approach for reverse repurchase agreements. As part of this rulemaking process, we are engaging in a holistic re-evaluation of our approach to regulating derivatives and similar transactions. As discussed previously, while asset segregation, depending on the assets segregated, can address the asset sufficiency and leverage concerns of the Act, we generally believe that when a fund exceeds the leverage limits contemplated by the Act, such concerns are more appropriately managed through a derivatives risk management program and other rule 18f-4 requirements. We do not believe that establishing an asset segregation regime for a limited subset of transactions, such as reverse repurchase agreements, is necessary. Moreover, providing separate and distinct regimes for bank borrowings and other transactions subject to the Act's asset coverage requirements, derivatives transactions

⁷³⁵ See *supra* footnote 704.

under the final rule, and an asset segregation requirement for reverse repurchase agreements and similar financing transactions would increase the likelihood that funds engaging in economically similar transactions would be subject to disparate regulatory requirements. Accordingly, in light of the approach we are adopting here, we do not believe that providing a separate asset segregation regime for reverse repurchase agreements and similar financing transactions is appropriate.

Some commenters requested that we provide different limits for reverse repurchase agreements or similar financing transactions for closed-end funds in light of the lower asset coverage ratio the Act allows for the issuance of preferred stock.⁷³⁶ While the Act provides a lower asset coverage ratio for such purposes, we believe that permitting closed-end funds the option to treat such transactions as derivatives transactions should address this issue. Under the final rule, closed-end funds can choose to engage in reverse repurchase agreements and similar financing transactions to the same extent as derivative transactions, which would allow them to use reverse repurchase agreement to the same degree or higher than would be permitted under the 200% asset coverage requirement for preferred stock in the Act.

Several commenters sought clarification on whether certain types of transactions (such as TOB financings) are “similar financing transactions” to reverse repurchase agreements and thus would be subject to the proposed asset coverage limit.⁷³⁷ We believe that TOB financings are economically similar to reverse repurchase agreements, and therefore are “similar financing transactions” under the final rule, where a fund engages in a TOB financing (as opposed to purchasing an “inverse floater” issued by a TOB trust in the secondary market). In a TOB

⁷³⁶ See, e.g., Nuveen Comment Letter; PIMCO Comment Letter. These commenters noted that unlike open-end funds, which are subject to a 300% asset coverage requirement for debt, which is the only form of leverage that such funds are permitted to use, registered closed-end funds and BDCs can also obtain equity-based leverage by selling preferred stock, which are subject to lower asset coverage requirements. These commenters asserted that closed-end funds should be allowed to treat reverse repurchase agreements and TOB Residuals for purposes of section 18 as a form of senior security representing stock subject to a 200% asset coverage requirement. Under section 18, whether a senior security involves equity or debt for purposes of that section does not depend on whether the fund entering into the transaction is an open-end or closed-end fund. We believe the final rule should take the same approach.

⁷³⁷ See, e.g., SIFMA AMG Comment Letter; Putnam Comment Letter.

financing, similar to a reverse repurchase agreement, a fund transfers a bond to a TOB trust that, in turn, issues floating rate securities to money market funds and other investors, often called “floaters,” and transfers to the fund the residual interest in the trust (an “inverse floater”) and the proceeds of the sale of the floating rate securities. The fund typically uses the cash proceeds from the sale of the floating rate securities to purchase additional portfolio securities. As one commenter on the 2015 proposal observed, a fund employing a TOB trust has in effect used the underlying bond as collateral to secure a borrowing analogous to a fund’s use of a security to secure a reverse repurchase agreement.⁷³⁸

Some commenters urged that the final rule should distinguish between “recourse” and “non-recourse” TOB financings.⁷³⁹ Under a “recourse” TOB financing, the fund holding the inverse floater is obligated to increase its investment in the TOB trust to either provide an additional cushion to the holder of the floaters or allow the liquidity provider to redeem some or all of the outstanding floaters, or make payments to a financial institution providing liquidity to the holders of the floaters. In a non-recourse TOB financing, the fund would not have a legal obligation to provide additional assets to the TOB trust or payments to liquidity providers.⁷⁴⁰ We do not believe that this distinction supports different treatment under section 18 or the final rule. We also note that GAAP does not support such a distinction.⁷⁴¹ In both a recourse and non-recourse TOB financing, the fund effectively is engaging in a leveraging transaction and receiving the proceeds from the sale of the floaters, which the fund can use to make further investments. Although the inverse floater, itself, may represent an equity interest in the TOB

⁷³⁸ See Proposing Release, *supra* footnote 1, at n.406 (citing the Comment Letter of the Securities Industry and Financial Markets Association (Mar. 28, 2016)).

⁷³⁹ See, e.g., SIFMA AMG Comment Letter.

⁷⁴⁰ SIFMA AMG Comment Letter; Nuveen Comment Letter.

⁷⁴¹ See, e.g., *FASB Accounting Standards Codification Transfers and Servicing (Topic 860)* (“ASC 860 Transfers and Servicing”). ASC 860 Transfers and Servicing, which applies to transfers and servicing of financial assets, provides guidance on the accounting for a transfer of financial assets as a sale to third parties and the use of financial assets as collateral in secured borrowings. Transactions related to TOB financings, including the initial transfer of the bond into the TOB trust and subsequent issuance of synthetic floaters, generally should be evaluated pursuant to ASC 860 to determine whether the transaction is a secured borrowing or a sale.

trust, we believe TOB financings involve a borrowing by the fund regardless of whether the holders of the floaters would look to the fund or some other party if the income produced by the bond deposited in the TOB trust or proceeds realized upon the bond's sale is insufficient to repay them.

Securities lending arrangements are structurally similar to reverse repurchase agreements in that, in both cases, a fund transfers a portfolio security to a counterparty in exchange for cash (or other assets).⁷⁴² Nevertheless, the Commission stated in the Proposing Release that it would not view a fund's obligation to return securities lending collateral as a "similar financing transaction" if the fund reinvests cash collateral in cash or cash equivalents (such as money market funds), and the fund does not sell or otherwise use non-cash collateral to leverage its portfolio.⁷⁴³ The Commission also stated that a fund that engages in securities lending under these circumstances is limited in its ability to use securities lending transactions to increase leverage in its portfolio.⁷⁴⁴

The commenters who addressed this issue agreed that securities lending transactions should not be treated as reverse repurchase agreements or similar transactions under the final rule under these circumstances.⁷⁴⁵ However, some of these commenters requested that we expand the types of assets in which funds can invest the securities lending proceeds beyond cash and cash

⁷⁴² In the 2015 Proposing Release, the Commission sought comment on whether rule 18f-4 should address funds' compliance with section 18 in connection with securities lending, to which commenters responded that the staff's current guidance on securities lending forms the basis for funds' securities lending practices and effectively addresses the senior securities implications of securities lending, and thus securities lending practices need not be addressed in the final rule. *See, e.g.*, Comment Letter of the Investment Company Institute (Mar. 28, 2016); Comment Letter of Guggenheim (Mar. 28, 2016); Comment Letter of the Securities Industry and Financial Markets Association (Mar. 28, 2016); Comment Letter of the Risk Management Association (Mar. 28, 2016); *see also* Staff Guidance on Securities Lending by U.S. Open-End and Closed-End Investment Companies (Feb. 27, 2014), *available at* <https://www.sec.gov/divisions/investment/securities-lending-open-closed-end-investment-companies.htm> (providing guidance on certain no-action letters that funds consider when engaging in securities lending and summarizing areas those letters address, including limitations on the amount that may be lent and collateralization for such loans).

⁷⁴³ *See* Proposing Release *supra* footnote 1, at nn.403-405 and accompanying text.

⁷⁴⁴ *Id.*

⁷⁴⁵ *See, e.g.*, ICI Comment Letter; BlackRock Comment Letter; Dechert Comment Letter I; SIFMA AMG Comment Letter.

equivalents.⁷⁴⁶ Commenters also requested that we clarify what instruments would qualify as cash or cash equivalents.⁷⁴⁷

We do not agree with commenters' suggestions that we expand the types of collateral in which a fund may reinvest its proceeds beyond cash and cash equivalents without treating the arrangements as reverse repurchase agreements or similar financing transactions under the final rule. If a fund were to engage in securities lending and to invest the cash collateral in securities other than cash or cash equivalents, this may result in leveraging of the fund's portfolio.

Accordingly, we believe this activity would be a "similar financing transaction" under the final rule. The Commission has previously stated that "[c]urrent U.S. generally accepted accounting principles define cash equivalents as short-term, highly liquid investments that are readily convertible to known amounts of cash and that are so near their maturity that they present insignificant risk of changes in value because of changes in interest rates."⁷⁴⁸ The Commission has also stated that items commonly considered to be cash equivalents include certain Treasury bills, agency securities, bank deposits, commercial paper, and shares of money market funds.⁷⁴⁹

I. Unfunded Commitment Agreements

As proposed, rule 18f-4 will permit a fund to enter into unfunded commitment agreements to make certain loans or investments if the fund reasonably believes, at the time it enters into such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements.⁷⁵⁰ This approach recognizes that while entering into unfunded commitment agreements may raise the risk that a fund may be unable to meet its obligations under these transactions, unfunded commitments do not generally involve the leverage and other risks associated with derivatives transactions.

⁷⁴⁶ See, e.g., ICI Comment Letter; BlackRock Comment Letter.

⁷⁴⁷ See, e.g., Putnam Comment Letter; SIFMA AMG Comment Letter.

⁷⁴⁸ See 2015 Proposing Release, *supra* footnote 1, at n.367 and accompanying text.

⁷⁴⁹ See *id.*, at n.368 and accompanying text.

⁷⁵⁰ Rule 18f-4(e)(1).

When a fund enters into an unfunded commitment agreement, the fund commits, conditionally or unconditionally, to make a loan to a company or to invest equity in a company in the future.⁷⁵¹ They include capital commitments to a private fund requiring investors to fund capital contributions or to purchase shares upon delivery of a drawdown notice. As proposed, the final rule will define an unfunded commitment agreement to mean a contract that is not a derivatives transaction, under which a fund commits, conditionally or unconditionally, to make a loan to a company or to invest equity in a company in the future, including by making a capital commitment to a private fund that can be drawn at the discretion of the fund's general partner.⁷⁵² The exclusion of derivatives transactions from this definition is predicated on our understanding that unfunded commitment agreements have certain characteristics that distinguish them from derivatives transactions.⁷⁵³

We continue to believe that unfunded commitment agreements are distinguishable from the derivatives transactions covered by rule 18f-4. Based on characteristics that we understand are typical of unfunded commitment agreements, we do not believe that funds enter into these agreements to leverage a fund's portfolio, or that they generally raise the Investment Company Act's concerns regarding the risks of undue speculation.⁷⁵⁴ Two commenters agreed that

⁷⁵¹ Proposing Release *supra* footnote 1, at section II.J. The types of funds that enter into unfunded commitment agreements typically include BDCs and registered closed-end funds. Certain types of open-end funds, such as floating rate funds and bank loan funds, also enter into unfunded commitment agreements, although to a lesser extent. We estimate that approximately 989 of 11,616 (8.5%) open-end funds, 205 of 678 (30%) closed-end funds, and 100% of BDCs entered into unfunded commitments in 2019. *See infra* footnote 1033.

⁷⁵² Rule 18f-4(a).

As discussed in the Proposing Release, commenters on the 2015 Proposal identified characteristics of unfunded commitment agreements that they believed distinguished them from derivatives transactions: 1) a fund often does not expect to lend or invest up to the full amount committed; 2) a fund's obligation to lend is commonly subject to conditions, such as a borrower's obligation to meet certain financial metrics and performance benchmarks, which are not typically present under the types of agreements that the Commission described in Release 10666; and 3) unfunded commitment agreements do not give rise to the risks that Release 10666 identified and do not have a leveraging effect on the fund's portfolio because they do not present an opportunity for the fund to realize gains or losses between the date of the fund's commitment and its subsequent investment when the other party to the agreement calls the commitment. *See* Proposing Release *supra* footnote 1, at nn.410-412 and accompanying text.

⁷⁵³ *See id.* at n.413 and accompanying text.

⁷⁵⁴ *Id.*

unfunded commitments are distinguishable from derivative transactions.⁷⁵⁵ Commenters also agreed that unfunded commitments do not give rise to the type of leverage risk that section 18 was meant to regulate.⁷⁵⁶ Two commenters expressly supported the proposed definition of “unfunded commitment agreement.”⁷⁵⁷ One commenter stated that the proposed definition may not clearly demarcate the difference between unfunded commitment agreements and derivatives transactions in all cases, but offered no suggestions regarding how to revise the definition to address this concern.⁷⁵⁸ We are adopting the definition of “unfunded commitment agreement” as proposed.

We believe that unfunded commitment agreements can raise the asset sufficiency concerns underlying the Investment Company Act, depending on the facts and circumstances. No commenters opposed this view, and one commenter agreed, stating that “[e]xcessive unfunded commitments, even made or acquired as the result of careful planning, may engender asset sufficiency concerns, particularly in the context of a market distortion.”⁷⁵⁹ We are therefore adopting, as proposed, an approach that will permit a fund to enter into unfunded commitment agreements if it reasonably believes, at the time it enters into such an agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements, in each case as they come due.⁷⁶⁰

A fund should consider its unique facts and circumstances in forming such a reasonable belief. As proposed, the final rule prescribes certain specific factors that a fund must take into account.⁷⁶¹ Specifically:

⁷⁵⁵ ABA Comment Letter; Aditum Comment Letter.

⁷⁵⁶ ABA Comment Letter; NYC Bar Comment Letter; Aditum Comment Letter.

⁷⁵⁷ Aditum Comment Letter; ICI Comment Letter.

⁷⁵⁸ Keen Comment Letter.

⁷⁵⁹ Aditum Comment Letter.

⁷⁶⁰ *See* rule 18f-4(e)(1). Because this condition is designed to provide an approach tailored to unfunded commitment agreements, the final rule also provides that these transactions will not be considered for purposes of computing asset coverage under section 18(h).

⁷⁶¹ Rule 18f-4(e)(1). The final rule requires the fund to make and maintain records documenting the basis for this belief, as proposed. *See* rule 18f-4(e)(2).

- A fund must take into account its reasonable expectations with respect to other obligations, including any obligation with respect to senior securities or redemptions. This factor reflects that other obligations can place competing demands on cash a fund otherwise might intend to use to fund an unfunded commitment agreement.
- A fund may not take into account cash that may become available from the sale or disposition of any investment at a price that deviates significantly from the market value of those investments. This provision is designed to address the risk that a fund could suffer losses by selling assets to raise cash to fund an unfunded commitment agreement, ultimately having an adverse impact on the fund's investors.
- A fund may not consider cash that may become available from issuing additional equity. We believe that a fund's ability to raise capital in the future depends on a variety of factors that are too speculative to support a fund's reasonable belief that it could fund an unfunded commitment agreement with the proceeds from future sales of securities issued by the fund, as discussed below.

The final rule will not preclude a fund from considering the issuance of debt (*e.g.* borrowings from financial institutions, or the issuance of debt securities) to support a reasonable belief that it could cover an unfunded commitment, as proposed.⁷⁶² We understand that funds often satisfy their obligations under unfunded commitments through borrowings, which are limited by section 18's asset coverage requirements. These asset coverage requirements, in turn, affect the extent to which a fund may form a reasonable belief regarding its ability to borrow, and likewise, to enter into unfunded commitment agreements.

To have a reasonable belief, a fund could consider, for example, its strategy, its assets' liquidity, its borrowing capacity under existing committed lines of credit, and the contractual

⁷⁶² Proposing Release, *supra* footnote 1, at section II.J.

provisions of its unfunded commitment agreements. A fund with unfunded loan commitments, for instance, could evaluate the likelihood that different potential borrowers would meet contractual “milestones” that the borrowers would have to satisfy as a condition to the obligation to fund a loan, as well as the amount of the anticipated borrowing. The fund’s historical experience with comparable obligations should inform this analysis. Whether a fund has a reasonable belief also could be informed by a fund’s assessment of the likelihood that subsequent market or other events could impair the fund’s ability to have sufficient cash and cash equivalents to meet its unfunded commitment obligations. One commenter confirmed that the proposed approach conforms with current industry practice for BDCs and other regulated funds.⁷⁶³

The commenters that addressed this aspect of the proposal broadly supported requiring a “reasonable belief” determination in connection with unfunded commitment agreements as set forth in the proposed rule.⁷⁶⁴ Two commenters recommended that the final rule treat unfunded commitments in the same manner as the proposed rule.⁷⁶⁵ One stated that the “reasonable belief” factors “are appropriate and will provide additional clarity for how a fund should handle determining whether or not it should enter into unfunded commitment agreements going forward.”⁷⁶⁶ Conversely, two commenters recommended changing certain aspects of the proposed factors, with one seeking greater flexibility, and the other advocating for more restrictive criteria.

The commenter advocating for additional flexibility suggested that, instead of being required to consider the proposed specified factors, funds be permitted to determine their own

⁷⁶³ ABA Comment Letter (“BDCs and other regulated funds that enter into unfunded commitments generally represent to the staff during the review of their registration statements that they believe their assets will provide adequate cover to satisfy unfunded commitments when due. In other words, funds have experience complying with the reasonable belief requirement under the Proposed Rules.”).

⁷⁶⁴ ABA Comment Letter; ICI Comment Letter, NYC Bar Comment Letter, Aditum Comment Letter.

⁷⁶⁵ ICI Comment Letter; ABA Comment Letter.

⁷⁶⁶ ABA Comment Letter.

factors to consider when making a “reasonable belief” determination with respect to asset sufficiency.⁷⁶⁷ This commenter stated that a more flexible approach would allow a fund to consider its unique facts and circumstances, and the Commission’s exam staff could review a fund’s records to assess what factors a fund considered when entering into unfunded commitment transactions. We believe the approach we are adopting provides this flexibility. While a fund must take into account the specified factors and prohibitions, it may consider any other factors it deems relevant for purposes of forming a reasonable belief as to its asset sufficiency. This commenter also suggested that in making an asset sufficiency determination, a fund should be permitted to consider its ability to raise cash by issuing equity securities, in addition to debt. We continue to believe, as the Commission discussed in the proposal, that a fund’s future ability to raise cash by issuing equity would depend on a variety of factors, including future market conditions, that are too speculative to support a reasonable belief that a fund could cover its unfunded commitments with the proceeds from future sales of the fund’s securities.⁷⁶⁸ Thus, the final rule precludes a fund that is making an asset sufficiency determination from taking into account cash that may become available from issuing additional equity, as proposed.

Conversely, another commenter urged the Commission to enhance or expand the specified factors to provide additional protections to investors.⁷⁶⁹ This commenter recommended that a fund making an asset sufficiency determination be precluded from considering the availability of any additional capital (including debt) because its ability to satisfy its unfunded commitments is likely to be most impaired during a market distortion, when it should least expect additional fund subscriptions or the availability of borrowed funds. We are not adopting

⁷⁶⁷ NYC Bar Comment Letter.

⁷⁶⁸ Proposing Release, *supra* footnote 1, at section II.J. Because an exchange-traded closed-fund can only sell shares if its share price is above NAV, its ability to issue equity is more limited (and thus, we believe more speculative) than its ability to issues debt or access a line of credit. *See* section 23(b) of the Investment Company Act (generally prohibiting a registered closed end fund or BDC from issuing its shares at a price below the fund’s current net asset value (“NAV”) without shareholder approval).

⁷⁶⁹ *See* Aditum Comment Letter.

this suggested approach. Borrowings may be an important way for funds to obtain cash to fund an unfunded commitment agreement. Closed-end funds that hold less liquid assets, for example, may rely on lending facilities rather than selling assets or holding cash. Moreover, although the final rule does not preclude a fund from considering its ability to borrow to satisfy unfunded commitments, a fund's reasonable belief would be based on all of the facts and circumstances, including whether the fund would reasonably expect to be able to access financing in a particular case.

This commenter also suggested requiring a fund to reassess whether its "reasonable belief" remains reasonable at various points during the period of the unfunded commitment agreement.⁷⁷⁰ We are not adopting this approach. Under the final rule, a fund must reassess its asset sufficiency before entering into any additional unfunded commitment agreements, when such information would be most relevant to such a determination. Requiring a fund to reassess its asset sufficiency after entering into a contract would be of limited use because regardless of the outcome, the fund would still be bound by the terms of the contract. Finally, this commenter urged that given the potential impact of a market distortion on a fund's ability to meet its unfunded commitments and the negative impact that a failure to meet these commitments would have on its investors, a fund's ability to enter into unfunded commitments should be subject to a "well-defined limitation." We are not adopting this approach, as the extent to which unfunded commitment agreements could raise asset sufficiency concerns depends on funds' facts and circumstances. We do not believe that an across-the-board limitation is appropriate in light of this, or is necessary given the protections our adopted approach will provide.

J. Recordkeeping Provisions

We are adopting, consistent with the proposal, certain recordkeeping requirements.⁷⁷¹ We did not receive comments on the proposed recordkeeping provisions. We are making certain conforming changes to the proposed recordkeeping provisions in light of changes to other

⁷⁷⁰ Aditum Comment Letter.

⁷⁷¹ See rule 18f-4(c)(6); *see also* proposed rule 18f-4(c)(6).

aspects of the final rule, which we discuss below. The final recordkeeping requirements are designed to provide our staff, and a fund's compliance personnel, the ability to evaluate the fund's compliance with the rule's requirements.

First, as proposed, the rule will require the fund to maintain certain records documenting the fund's derivatives risk management program. Specifically, for a fund subject to the rule's program requirements, the rule requires the fund to maintain a written record of its policies and procedures that are designed to manage the fund's derivatives risks. The rule also requires a fund to maintain a written record of the results of any stress testing of its portfolio, the results of any VaR test backtesting it conducts, any internal reporting or escalation of material risks under the program, and any periodic reviews of the program.

Second, as proposed, the rule will require funds to keep records of any materials provided to the fund's board of directors in connection with approving the designation of the derivatives risk manager. The rule also will require a fund to keep records of any written reports provided to the board of directors relating to the program, and any written reports provided to the board that the rule requires regarding the fund's non-compliance with the applicable VaR test, as proposed. We also are making a new conforming change in light of a change to the rule's remediation provision for a fund that is out of compliance with its applicable VaR test. The final rule includes a new reporting requirement providing that the derivatives risk manager, within thirty calendar days of the exceedance, must provide a written report to the fund's board of directors explaining how the fund came back into compliance and the results of the derivatives risk manager's analysis of the circumstances that caused the fund to be out of compliance for more than five business days and any updates to the program elements.⁷⁷² As part of this new reporting provision, if the fund remains out of compliance with the applicable VaR test at that time, the derivatives risk manager's written report must update the report previously provided to the fund's board of directors and explain how and by when he or she reasonably expects that the

⁷⁷² Rule 18f-4(c)(2)(iii)(C).

fund will come back into compliance. These reports will be covered by the final recordkeeping requirements.

Third, as proposed, for a fund that is required to comply with the VaR-based limit on fund leverage risk, the fund will have to maintain records documenting the fund's determination of: the VaR of its portfolio; the VaR of the fund's designated reference portfolio, as applicable; the fund's VaR ratio (the value of the VaR of the fund's portfolio divided by the VaR of the designated reference portfolio), as applicable; and any updates to any VaR calculation models used by the fund, as well as the basis for any material changes made to those models.

Fourth, generally as proposed, the rule will require a fund that is a limited derivatives user to maintain a written record of its policies and procedures that are reasonably designed to manage its derivatives risk. We are updating the cross reference cite in the recordkeeping provision to reflect the new paragraph number for the limited derivatives users' policies and procedures requirement. We also are making a new conforming change in light of the rule's limited derivatives user provision requiring written reports to the board of directors for fund exceedances of the limited derivatives user exception's 10% derivatives exposure threshold. These reports will be covered by the final recordkeeping requirements.

Fifth, as proposed, the rule will require a fund that enters into unfunded commitment agreements to maintain a record documenting the basis for the fund's basis for its reasonable belief regarding the sufficiency of its cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements.⁷⁷³ A fund must make such a record each time it enters into such an agreement.

Sixth, the final recordkeeping requirement includes a new conforming change in light of the final rule providing two separate treatment options for a fund that enters into a reverse repurchase agreement or similar financing transaction. Under this new recordkeeping requirement, the fund must maintain a written record documenting whether the fund is treating

⁷⁷³ Rule 18f-4(e)(2).

these transactions, as set forth in the rule, under (1) an asset coverage requirements approach or (2) a derivatives transactions treatment approach.⁷⁷⁴

Finally, the rule will require funds to maintain the required records for a period of five years.⁷⁷⁵ In particular, a fund must retain a copy of its written policies and procedures under the rule that are currently in effect, or were in effect at any time within the past five years, in an easily accessible place.⁷⁷⁶ In addition, a fund will have to maintain all other records and materials that the rule would require the fund to keep for at least five years (the first two years in an easily accessible place).⁷⁷⁷

K. Conforming Amendments

1. Form N-PORT and Rule 22e-4

In change from the proposal, and in response to comments, we are amending rule 22e-4 and a related reporting requirement on Form N-PORT to remove references to assets “segregated to cover” derivatives transactions.⁷⁷⁸ These are references to assets segregated in accordance with Release 10666 and related staff guidance, which are being rescinded in connection with the final rule. The final rule does not include an asset segregation requirement, and these references therefore are moot and superseded. Although the Commission did not propose to amend rule 22e-4 or the related reporting requirement in Form N-PORT, the Proposing Release included requests for comment regarding whether references to “segregated” assets in rule 22e-4 should be removed, and whether the Commission should make any other conforming amendments to its rules or forms. Commenters who responded to these requests for comment urged the

⁷⁷⁴ Rule 18f-4(d)(2).

⁷⁷⁵ Rule 18f-4(c)(6)(ii); rule 18f-4(d)(2); rule 18f-4(e)(2).

⁷⁷⁶ Rule 18f-4(c)(6)(ii)(A). The retention requirement will apply to both funds that are required to implement a derivatives risk management program and funds that are limited derivatives users under rule 18f-4(c)(4).

⁷⁷⁷ Rule 18f-4(c)(6)(ii)(B); rule 18f-4(d)(2); rule 18f-4(e)(2).

⁷⁷⁸ We are removing these references from, and making conforming changes to, paragraph (b)(1)(ii)(C) of rule 22e-4 and the related note to this paragraph; paragraph (b)(iii)(B) of rule 22e-4; and Item B.8 of Form N-PORT. We also are amending these provisions to refer to “collateral,” in addition to “margin,” and adding an instruction to Item B.8 of Form N-PORT regarding the calculation required by that item. These amendments are designed to make these provisions clearer and do not reflect any changes in the underlying requirements.

Commission to remove these references from rule 22e-4, and some commenters also suggested removing the parallel references in a related reporting requirement in Form N-PORT.⁷⁷⁹

One commenter also stated that the current Form N-PORT description of “derivatives transactions” is not consistent with the Proposed Rule’s definition, “which includes transactions not customarily considered ‘derivatives’ (e.g., TBAs).”⁷⁸⁰ The commenter recommended that the Commission undertake a review of affected public disclosures to evaluate whether an existing and commonly used definition of derivatives transactions should be used for purposes of the revised Form N-PORT reporting to avoid investor confusion and administrative cost associated with differing definitions.

We recognize that the final rule’s “derivatives transaction” definition includes some instruments not generally described as “derivatives,” and also excludes other instruments commonly understood as derivatives where they do not involve a future payment obligation. Accordingly, we are amending Form N-PORT’s general instructions to make clear that the term “derivatives transactions” has the same meaning as in rule 18f-4 solely with respect to N-PORT items that relate specifically to the rule.⁷⁸¹

2. Form N-2 (Senior Securities Table)

As proposed, we are amending Form N-2 to provide that funds relying on rule 18f-4 will not be required to include their derivatives transactions and unfunded commitment agreements in the senior securities table on Form N-2.⁷⁸² This amendment conforms Form N-2’s senior securities table to the provisions of the final rule that provide that a fund’s derivatives transactions and unfunded commitment agreements entered into in compliance with the rule will not be considered for purposes of computing asset coverage under section 18(h). We believe that

⁷⁷⁹ Putnam Comment Letter; Invesco Comment Letter; Vanguard Comment Letter; ICI Comment Letter.

⁷⁸⁰ Fidelity Comment Letter.

⁷⁸¹ General Instruction E of Form N-PORT.

⁷⁸² See amendment to Instruction 2 of Item 4.3 of Form N-2; proposed amendment to Instruction 2 of Item 4.3 of Form N-2. This amendment will apply to registration statements on a prospective basis. Accordingly, the amendment does not require funds to modify information provided for periods before a fund begins to rely on the final rule.

applying section 18's asset coverage requirements to these transactions is unnecessary in light of rule 18f-4's specific requirements tailored to address these transactions. We are adopting these provisions as proposed.

One commenter suggested the Commission clarify how a fund should "not consider" derivatives transactions for purposes of calculating asset coverage under section 18(h), in light of the proposed provision providing that derivatives transactions entered into under the proposed rule will not be considered for purposes of computing asset coverage under section 18(h).⁷⁸³ The commenter asked, for example, if a fund should include the assets and liabilities associated with a written option in the calculation, or the gains and losses associated with the option's premium. We believe a fund would "not consider" a derivatives transaction for purposes of calculating asset coverage, and accordingly for disclosure in the senior securities table, by not including the derivatives transaction or any component of the derivatives transaction in the calculation. We do not believe that this provision in the final rule requires the fund to track gains and losses associated with the fund's investment of options' premium, margin, or collateral received in connection with the fund's derivatives transactions.

L. Compliance Date

The Commission is providing a transition period to give funds sufficient time to comply with the provisions of rule 18f-4 and the related reporting requirements.⁷⁸⁴ Specifically, we are adopting a compliance date for rule 18f-4 and the related amendments in this release that is eighteen months following the effective date. We believe that an eighteen-month compliance period provides sufficient time for all funds to come into compliance with the rule and the related reporting requirements. Accordingly, we are also rescinding Release 10666, effective August 19, 2022.⁷⁸⁵ In addition, staff in the Division of Investment Management has reviewed its no-action letters and other guidance addressing derivatives transactions and other transactions covered by

⁷⁸³ See Comment Letter of Ernst Young LLP (Mar. 24, 2020).

⁷⁸⁴ The "related reporting requirements" include the amendments to fund reporting requirements discussed in section II.G, as well as the amendments to rule 30b1-10.

⁷⁸⁵ See *supra* section I.C.

proposed rule 18f-4 to determine which letters and other staff guidance, or portions thereof, should be withdrawn in connection with the final rule. This review included, but was not limited to, the staff no-action letters and other guidance identified in the Proposing Release. Some of these letters and other staff guidance, or portions thereof, will be moot, superseded, or otherwise inconsistent with the final rule and, therefore, will be withdrawn by the staff, effective upon the rescission of Release 10666.⁷⁸⁶

Commenters urged the Commission to provide more time beyond the one-year transition period we discussed in the Proposing Release, generally suggesting an eighteen-month or two-year period to provide time for funds to prepare to comply with the rule's requirements.⁷⁸⁷ In particular, commenters stated that a one-year transition period would not provide sufficient time to implement the derivatives risk management program and the VaR limit, and to designate a qualified derivatives risk manager.⁷⁸⁸ Delaying the rescission of Release 10666 and the staff's rescission of its no-action letters and other guidance for eighteen months is designed to provide additional time for funds to prepare to transition their current approaches and come into compliance with the final rule and the related reporting requirements.

A fund may rely on rule 18f-4 after its effective date but before the compliance date, provided that the fund satisfies the rule's conditions.⁷⁸⁹ To promote regulatory consistency, however, any fund that elects to rely on rule 18f-4 prior to the date when Release 10666 is rescinded may rely only on rule 18f-4, and not also consider Release 10666, staff no-action letters, or other staff guidance in determining how it will comply with section 18 with respect to

⁷⁸⁶ We also intend, after appropriate notice and opportunity for hearing, to rescind orders we have granted to funds providing exemptive relief from section 18(f) relating to investments in certain futures contracts, related options and/or options on stock indices that is superseded by or otherwise inconsistent with rule 18f-4. Based on staff review of filings on Form N-CEN, no fund is relying on these exemptive orders.

⁷⁸⁷ See e.g. Invesco Comment Letter; Fidelity Comment Letter; Dechert Comment Letter I; Capital Group Comment Letter.

⁷⁸⁸ See e.g. Dechert Comment Letter I; Fidelity Comment Letter; Invesco Comment Letter.

⁷⁸⁹ Similarly, leveraged/inverse funds will be able to rely on rule 6c-11 once rule 18f-4 is effective and the leveraged/inverse funds comply with its conditions. In addition, we are rescinding the exemptive orders provided to leveraged/inverse ETFs on the compliance date for rule 18f-4. See *supra* footnote 622 and accompanying text.

its use of derivatives and the other transactions that rule 18f-4 addresses. In addition, rule 18f-4 provides that, if a fund experiences a reportable event on Form N-RN, the fund must file with the Commission a report on Form N-RN within the period and according to the instructions specified in that form.⁷⁹⁰ Until the Commission staff completes the process of updating current Form N-LIQUID on EDGAR to reflect the amendments we have adopted, including retitling the form as “Form N-RN,” a fund relying on rule 18f-4 may satisfy the requirement to file a report on Form N-RN by including information that Form N-RN requires in a report on Form N-LIQUID filed on EDGAR. A fund may contact Commission staff with any questions regarding this filing process.

Because the reporting requirements we are adopting will enhance the Commission’s ability to oversee funds’ use of and compliance with rule 18f-4 effectively, we are requiring a fund that relies on rule 18f-4 prior to the rule’s compliance date also to comply with the amendments we are adopting to Form N-PORT and Form N-CEN, as applicable, once these updated forms are available for filing on EDGAR. We appreciate that funds will not be able to comply with these new reporting requirements until Commission staff completes the process of updating these amended forms for filing on EDGAR. Therefore, until this updating process is complete, a fund may elect to rely on rule 18f-4 prior to the rule’s compliance date without also complying with these reporting requirements. Commission staff will issue a notice to the public when the updated forms are available for filing on EDGAR.

M. Other Matters

Pursuant to the Congressional Review Act,⁷⁹¹ the Office of Information and Regulatory Affairs has designated this rule a “major rule,” as defined by 5 U.S.C. 804(2). If any of the provisions of these rules, or the application thereof to any person or circumstance, is held to be

⁷⁹⁰ Rule 18f-4(c)(7).

⁷⁹¹ 5 U.S.C. 801 *et seq.*

invalid, such invalidity shall not affect other provisions or application of such provisions to other persons or circumstances that can be given effect without the invalid provision or application.

III. ECONOMIC ANALYSIS

We are mindful of the costs imposed by, and the benefits obtained from, our rules.

Section 2(c) of the Investment Company Act provides that when the Commission is engaging in rulemaking under the Act and is required to consider or determine whether an action is consistent with the public interest, the Commission shall also consider whether the action will promote efficiency, competition, and capital formation, in addition to the protection of investors. The following analysis considers, in detail, the potential economic effects that may result from the final rules, including the benefits and costs to investors and other market participants as well as the broader implications of the final rules for efficiency, competition, and capital formation.

A. Introduction

Funds today use a variety of derivatives, both to obtain investment exposure as part of their investment strategies and to manage risks. A fund may use derivatives to gain, maintain, or reduce exposure to a market, sector, or security more quickly, or to obtain exposure to a reference asset for which it may be difficult or impractical for the fund to make a direct investment. A fund may use derivatives to hedge interest rate, currency, credit, and other risks, as well as to hedge portfolio exposures.⁷⁹² As funds' strategies have become increasingly diverse over the past several decades, funds' use of derivatives has grown in both volume and complexity. At the same time, a fund's derivatives use may entail risks relating to, for example, leverage, markets, operations, liquidity, and counterparties, as well as legal risks.⁷⁹³

Section 18 of the Investment Company Act is designed to limit the leverage a fund can obtain through the issuance of senior securities.⁷⁹⁴ As discussed above, a fund's derivatives use may raise the investor protections concerns underlying section 18. In addition, funds' asset

⁷⁹² See *supra* section I.A.

⁷⁹³ See, e.g., *supra* footnotes 15-16 and accompanying text.

⁷⁹⁴ See *supra* section I.B.1.

segregation practices have developed such that funds' derivatives use—and thus funds' potential leverage through derivatives transactions—does not appear to be subject to a practical limit as the Commission contemplated in Release 10666.

Rule 18f-4 is designed to provide an updated, comprehensive approach to the regulation of funds' use of derivatives and certain other transactions. The final rule will permit a fund, subject to certain conditions, to enter into derivatives or other transactions, notwithstanding the prohibitions and restrictions on the issuance of senior securities under section 18 of the Investment Company Act. We believe that the final rule's requirements, including the derivatives risk management program requirement and VaR-based limit on fund leverage risk, will benefit investors by mitigating derivatives-related risks, including those that may lead to unanticipated and potentially significant losses for investors.

Certain funds use derivatives in a limited manner, which we believe presents a lower degree of risk or potential impact and generally a lower degree of leverage than permitted under section 18. The final rule will provide an exception from the derivatives risk management program requirement and VaR-based limit on fund leverage risk and the related board oversight and reporting provisions (collectively, the "VaR and program requirements," as noted above) for these limited derivatives users. Instead, the final rule will require a fund relying on this exception to adopt policies and procedures that are reasonably designed to manage its derivatives risks. Funds with limited derivatives exposure will therefore not be required to incur costs and bear compliance burdens that may be disproportionate to the resulting benefits, while still being required to manage the risks their limited use of derivatives may present.⁷⁹⁵

Leveraged/inverse funds generally will be subject to the requirements of rule 18f-4 on the same basis as other funds subject to that rule, including the VaR-based leverage risk limit.⁷⁹⁶ The

⁷⁹⁵ See *supra* sections I.C and II.E.

⁷⁹⁶ The enhanced standard of conduct for broker-dealers under Regulation Best Interest and the fiduciary obligations of registered investment advisers also will apply in the context of recommended transactions and transactions occurring in an advisory relationship with respect to these funds and the listed commodity pools that would have been subject to the proposed sales practices rules.

rule will, however, provide an exception from the VaR-based limit on fund leverage risk for leveraged/inverse funds currently in operation that seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index. The conditions to this exception are designed to allow these funds to continue to operate in their current form, but prohibit them from changing their index or increasing the amount of their leveraged or inverse market exposure.

Rule 18f-4 also contains requirements for funds' use of certain senior securities that are not derivatives. Specifically, the final rule permits a fund to either choose to limit its reverse repurchase and other similar financing transaction activity to the applicable asset coverage limit of the Act for senior securities representing indebtedness, as proposed, or a fund may instead treat them as derivatives transactions. This approach reflects that reverse repurchase agreements and similar financing transactions can be used to introduce leverage into a fund's portfolio just like other forms of borrowings, or derivatives.⁷⁹⁷

In addition, the final rule will permit a fund to enter into unfunded commitment agreements if it reasonably believes, at the time it enters into such an agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements.⁷⁹⁸ This requirement is designed to address the concern that a fund may experience losses as a result of having insufficient assets to meet its obligations with respect to these transactions, and we believe that the requirement will benefit investors by mitigating such losses or other adverse effects if a fund is unable to satisfy an unfunded commitment agreement.⁷⁹⁹

The final rule also includes a provision that will allow funds, as well as money market funds, to invest in securities on a when-issued or forward-settling basis, or with a non-standard

⁷⁹⁷ Similar financing transactions may include securities lending arrangements and TOBs, depending on the particular facts and circumstances of the individual transaction. *See supra* section II.H.

⁷⁹⁸ *See supra* section II.I.

⁷⁹⁹ We believe that the treatment of unfunded commitment transactions is consistent with general market practices. Therefore, we believe that the requirements for these transactions will not have significant economic effects when measured against this baseline.

settlement cycle, subject to certain conditions.⁸⁰⁰ This provision reflects our view that these short-term transactions generally do not raise the concerns about fund leverage risk underlying section 18.

This rule also includes certain recordkeeping requirements and reporting requirements for funds that use derivatives.⁸⁰¹ We expect that the recordkeeping requirements will benefit investors by facilitating fund compliance with the final rule and our staff's review of funds' compliance. In addition, we expect that the amendments we are adopting to Forms N-PORT, N-CEN, and N-LIQUID (which is being re-titled as Form N-RN) will further benefit investors primarily by enhancing the Commission's understanding of the impact of funds' use of derivatives on fund portfolios, and by facilitating the Commission's ability to oversee funds' use of derivatives and compliance with the final rules.⁸⁰²

B. Economic Baseline

1. Fund Industry Overview

The fund industry has grown and evolved substantially in past decades in response to various factors, including investor demand, technological developments, and an increase in domestic and international investment opportunities, both retail and institutional.⁸⁰³ As of July 2020, there were 10,092 mutual funds (excluding money market funds) with \$19,528 billion in total net assets, 2,142 ETFs organized as an open-end fund or as a share-class of an open-end fund with \$3,462 billion in total net assets, 666 registered closed-end funds with \$307 billion in total net assets, and 13 variable annuity separate accounts registered as management investment

⁸⁰⁰ See *supra* section II.A.

⁸⁰¹ See *supra* sections II.C and II.G.

⁸⁰² Because existing leveraged/inverse funds with a stated target multiple that is equal to or below the VaR-based limit on leveraged risk in rule 18f-4 will be subject to the VaR-based limit on fund leverage risk, these funds will be subject to the related reporting requirements on Forms N-PORT and N-RN. Conversely, existing leveraged/inverse funds that seek to provide leveraged or inverse market exposure exceeding 200% of the return of the relevant index will not be subject to the condition of rule 18f-4 limiting fund leverage risk and thus not subject to the related reporting requirements on Forms N-PORT and N-RN. However, such funds will have to disclose this exemption in their prospectuses. All leveraged/inverse funds will also be subject to the new requirements on Form N-CEN.

⁸⁰³ See Proposing Release, *supra* footnote 1, at n.1.

companies on Form N-3 with \$216 billion in total net assets. There also were 420 money market funds with \$3,881 billion in total net assets.⁸⁰⁴ Finally, as of July 2020, there were 99 BDCs with \$58 billion in total net assets.⁸⁰⁵

2. Funds' Use of Derivatives and Reverse Repurchase Agreements

DERA staff analyzed funds' use of derivatives and reverse repurchase agreements based on Form N-PORT filings as of September 2020. The filings covered 9,700 mutual funds with \$17,059 billion in total net assets, 1,973 ETFs with \$3,252 billion in total net assets, 672 registered closed-end funds with \$276 billion in net assets, and 13 variable annuity separate accounts registered as management investment companies with \$179 billion in total net assets.⁸⁰⁶

Based on this analysis, 60% of funds reported no derivatives holdings, and a further 26% of funds reported using derivatives with gross notional amounts below 50% of net assets. These results are comparable to and consistent with the findings of a white paper prepared by DERA staff that studied a random sample of 10% of funds in 2015.⁸⁰⁷ The 14% of funds that reported derivatives holdings at or above 50% of net assets reported combined net assets of \$1,886

⁸⁰⁴ Estimates of the number of registered investment companies and their total net assets are based on a staff analysis of Form N-CEN filings as of July 8, 2020. For open-end funds that have mutual fund and ETF share classes, which only one fund sponsor currently operates, we count each type of share class as a separate fund and use data from Morningstar to determine the amount of total net assets reported on Form N-CEN attributable to the ETF share class. Money market funds generally are excluded from the scope of rule 18f-4, but may rely on the provision in the rule for investments in when-issued and similar securities. We therefore report their number and net assets separately from those of other mutual funds.

⁸⁰⁵ Estimates of the number of BDCs and their net assets are based on a staff analysis of Form 10-K and Form 10-Q filings as of July 30, 2020. Our estimate includes BDCs that may be delinquent or have filed extensions for their filings, and it excludes 6 wholly-owned subsidiaries of other BDCs.

⁸⁰⁶ The analysis is based on each registrant's latest Form N-PORT filing as of September 15, 2020. Money market funds are excluded from the analysis; they do not file monthly reports on Form N-PORT and generally are excluded from the scope of rule 18f-4. For open-end funds that have mutual fund and ETF share classes, we count each type of share class as a separate fund and use data from Morningstar to determine the amount of total net assets reported on Form N-PORT attributable to the ETF share class.

⁸⁰⁷ See Daniel Deli, Paul Hanouna, Christof Stahel, Yue Tang & William Yost, *Use of Derivatives by Registered Investment Companies*, Division of Economic and Risk Analysis (2015), available at <https://www.sec.gov/dera/staff-papers/white-papers/derivatives12-2015.pdf>.

billion, which represented 8% of fund industry net assets. One percent of funds reported entering into reverse repurchase agreements.

BDCs do not file Form N-PORT. To help evaluate the extent to which BDCs use derivatives, our staff reviewed the most recent financial statements of 48 of the current 99 BDCs as of July 2020.⁸⁰⁸ Based on this analysis, we observe that most BDCs do not use derivatives extensively. Of the sampled BDCs, 59.1% did not report any derivatives holdings, and a further 31.8% reported using derivatives with gross notional amounts below 10% of net assets. We do not believe that BDCs use reverse repurchase agreements to a significant extent.⁸⁰⁹

3. Current Regulatory Framework for Derivatives

Funds generally have developed certain general asset segregation practices to “cover” their derivatives positions, considering at least in part the staff’s no-action letters and guidance.⁸¹⁰ However, as discussed in the proposal, practices vary based on the type of derivatives transaction, and funds use different practices regarding the types of assets that they segregate to cover their derivatives positions. For purposes of establishing the baseline, we assume that funds generally segregate sufficient assets to at least cover any mark-to-market liabilities on the funds’ derivatives transactions, with some funds segregating more assets for certain types of derivatives transactions (sufficient to cover the full notional amount of the transaction or an amount between the transaction’s full notional amount and any mark-to-market liability).⁸¹¹ The mark-to-market liability of a derivative can be much smaller than the full investment exposure associated with the position. As a result, funds’ current asset segregation practices do not appear to place a practical limit on their use of derivatives: a fund that segregates only the mark-to-market liability could theoretically incur virtually unlimited

⁸⁰⁸ See *supra* footnote 397 and accompanying text.

⁸⁰⁹ See also *supra* footnote 712 (stating our belief that BDCs do not use reverse repurchase agreements and bank borrowings (or similar transactions) in combined amounts that exceed 50% of NAV).

⁸¹⁰ See *supra* section II.B.1.

⁸¹¹ See Proposing Release, *supra* footnote 1, at n.54-55 and accompanying text.

investment leverage.⁸¹² Moreover, funds' current asset segregation practices may not assure the availability of adequate assets to meet funds' derivatives obligations, on account of both the amount and types of assets that funds may segregate.

4. Funds' Derivatives Risk Management Practices and Use of VaR Models

There is currently no requirement for funds that use derivatives to have a formalized derivatives risk management program. However, we understand that advisers to many funds whose investment strategies entail the use of derivatives already assess and manage risks associated with their derivatives transactions to varying extents.⁸¹³ In addition, we understand that funds engaging in derivatives transactions have increasingly used stress testing as a risk management tool over the past decade.⁸¹⁴

We also understand that VaR calculation tools are widely available, and many advisers that enter into derivatives transactions already use risk management or portfolio management platforms that include VaR tools.⁸¹⁵ Advisers to funds that use derivatives more extensively may be particularly likely currently to use risk management or portfolio management platforms that include VaR capability. Moreover, advisers that manage (or that have affiliates that manage) UCITS funds may already be familiar with using VaR models in connection with European guidelines.⁸¹⁶ One commenter submitted the results of a survey based on responses from 24 fund complexes with \$13.8 trillion in assets.⁸¹⁷ The results of this survey indicate that 73% of

⁸¹² See *supra* section I.B.2; footnote 69 and accompanying text.

⁸¹³ See, e.g., AQR Comment Letter I, at 4.

⁸¹⁴ See *supra* footnote 194.

⁸¹⁵ See Proposing Release, *supra* footnote 1, at n.180.

⁸¹⁶ See e.g. ABA Comment Letter; Blackrock Comment Letter; Dechert Comment Letter I; Vanguard Comment Letter. Based on a staff analysis of Form ADV and Form N-CEN filings received through July 31, 2020, there were approximately 190 registered investment advisers that are registered with a EU financial regulatory authority and that are reported as the investment adviser, or sub-adviser, for a registered fund. This estimate may not capture instances where a U.S. registered investment adviser and a EU registered investment adviser are affiliated but separate legal entities.

⁸¹⁷ See Comment Letter of Investment Company Institute (Oct. 8, 2019) ("2019 ICI Comment Letter"). The commenter also indicated that the surveyed ICI member firms accounted for 67% of mutual fund and ETF assets as of June 2019 and that survey responses were submitted by firms

respondents used some form of both VaR and stress testing as derivatives risk management tools.

Other commenters also observed that VaR is commonly used.⁸¹⁸

5. Leveraged/Inverse Funds

Leveraged/inverse investment funds generally target a daily return (or a return over another predetermined time period) that is a multiple, inverse, or inverse multiple of the return of an underlying index; however over longer holding periods, the realized leverage multiple of the returns of an investment in a leveraged/inverse investment vehicle relative to the returns of its underlying index can vary substantially from the vehicle's daily leverage multiple. To achieve the stated leverage multiple, most leveraged/inverse investment funds rebalance their exposure to the underlying index daily.⁸¹⁹

Currently, there are 172 leveraged/inverse ETFs with \$33.4 billion in total net assets and 120 leveraged/inverse mutual funds with \$4.6 billion in total net assets. Of these funds, 70 leveraged/inverse ETFs with \$15.7 billion in total net assets and none of the leveraged/inverse mutual funds currently seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index.⁸²⁰

Two ETF sponsors currently rely upon exemptive relief from the Commission that permits them to operate leveraged/inverse ETFs.⁸²¹ Since 2009, the Commission has not granted

“whose assets under management spanned the spectrum from small to very large.” However, these representations alone do not provide sufficient information about whether the surveyed firms were representative of all mutual funds and ETFs in terms of the exact distribution of specific characteristics, such as firm size or type of investment strategy.

⁸¹⁸ See, e.g., *supra* footnotes 287-291 and accompanying text.

⁸¹⁹ Leveraged/inverse funds that track the returns of an underlying index over time periods that are longer than one day rebalance their portfolios at the end of each such period. Leveraged/inverse funds use derivatives to achieve their targeted returns.

⁸²⁰ Estimates of the number of leveraged/inverse mutual funds and leveraged/inverse ETFs and their total net assets are based on a staff analysis of Form N-CEN filings as of July 7, 2020 and are based on fund's responses to item C.3.c of the form. Information about the market exposure funds seek to provide is based on a staff review of funds' summary prospectuses and takes into account that several leveraged/inverse funds that sought to provide 300% leveraged or inverse market exposure recently reduced their target exposures to 200% due to the increased market volatility caused by COVID-19. See also *supra* footnote 24 and accompanying text.

⁸²¹ See Proposing Release, *supra* footnote 1, at nn.307 and 356. The exemptive orders of the two sponsors that operate leveraged/inverse ETFs permit these sponsors to launch additional funds under the terms and conditions of those orders.

leveraged/inverse ETF exemptive relief to any additional sponsors. In addition, leveraged/inverse ETFs are currently excluded from the scope of rule 6c-11, which the Commission adopted in 2019 and allows ETFs satisfying certain conditions to operate without obtaining an exemptive order from the Commission.⁸²² While certain exchange-listed commodity- or currency-based trusts or funds that are not registered investment companies also have strategies that are similar to leveraged/inverse funds, and other investments like certain exchange-traded notes may provide a similar investment exposure, the final rules' provisions for leveraged/inverse funds address only registered investment companies with these strategies.

C. Benefits and Costs of the Final Rules and Amendments

The Commission is sensitive to the economic effects that may result from the final rules and form amendments, including benefits and costs. Where possible, we have attempted to quantify the likely economic effects; however, we are unable to quantify certain economic effects because we lack the information necessary to provide reasonable estimates. In some cases, it is difficult to predict how market participants will act under the conditions of the final rules. For example, we are unable to predict whether the derivatives risk management program requirement and VaR-based limit on fund leverage risk may make investors more or less likely to invest in funds that would be subject to these requirements or the degree to which these requirements may affect the use of derivatives by these funds. Nevertheless, as described more fully below, we are providing both a qualitative assessment and quantified estimate of the economic effects, including the initial and ongoing costs of the additional reporting requirements, where feasible.

Direct costs that funds will incur, as discussed below, may to some extent be absorbed by a fund's investment adviser or be passed on to a fund's investors in the form of increased fees and expenses.⁸²³ The share of these costs borne by funds, their advisers, and investors depends

⁸²² See *supra* footnotes 613-614 and accompanying text.

⁸²³ Several commenters stated that a fund may pass on some of the costs associated with the rule's requirements to its investors. See Dechert Comment Letter I; Dechert Comment Letter II; ICI Comment Letter; Vanguard Comment Letter.

on multiple factors, including the nature of competition between advisers, and investors' relative sensitivity to changes in fund fees, the joint effects of which are particularly challenging to predict due to the number of assumptions that the Commission would need to make.

1. Derivatives Risk Management Program and Board Oversight and Reporting

Rule 18f-4 will require funds that enter into derivatives transactions and are not limited derivatives users to adopt and implement a derivatives risk management program. The program will have to include risk guidelines, stress testing, backtesting, internal reporting and escalation, and program review elements. The final rule will require a fund's board of directors to approve the fund's designation of a derivatives risk manager, who will be responsible for administering the derivatives risk management program.⁸²⁴ The fund's derivatives risk manager will have to report to the fund's board on the derivatives risk management program's implementation and effectiveness and the results of the fund's stress testing and backtesting.⁸²⁵

We understand that advisers to many funds whose investment strategies entail the use of derivatives already assess and manage risks associated with their derivatives transactions.⁸²⁶ However, rule 18f-4's requirement that funds establish written derivatives risk management programs will create a standardized framework for funds' derivatives risk management by requiring each fund's program to include all of the rule's program elements. To the extent that the resulting risk management activities are more comprehensive than funds' current practices, this may result in more effective risk management across funds. While the adoption of a derivatives risk management program requirement may not eliminate all derivatives-related risks, including that investors could experience large, unexpected losses from funds' use of derivatives, we expect that investors may benefit from a decrease in leverage-related risks.

⁸²⁴ See *supra* section II.C.1. for a discussion of the final rule's requirements for board approval of the derivatives risk manager and the comments we received on the proposal.

⁸²⁵ See *supra* section II.C.2. for a discussion of the final rule's board reporting requirements and the comments we received on the proposal.

⁸²⁶ See *supra* section III.B.4. See also Blackrock Comment Letter; ICI Comment Letter; and J.P. Morgan Comment Letter.

Some funds may reduce or otherwise alter their use of derivatives transactions to respond to risks identified after adopting and implementing their derivatives risk management programs. In particular, we expect that funds currently utilizing risk management practices that are not tailored to their use of derivatives may decide to make such changes to their portfolios.⁸²⁷

Rule 18f-4 will require a fund to reasonably segregate the functions of its derivatives risk management program from those of its portfolio management.⁸²⁸ This segregation requirement is designed to enhance the program's effectiveness by promoting the objective and independent identification and assessment of derivatives risk.⁸²⁹ Segregating the functions of a fund's derivatives risk management program from those of its portfolio management may also mitigate the risks posed by competing incentives between a fund's portfolio managers and its investors.⁸³⁰

Finally, to the extent that the periodic stress testing and backtesting requirements of the derivatives risk management program result in fund managers developing a more complete understanding of the risks associated with their use of derivatives, we expect that funds and their investors will benefit from improved risk management.⁸³¹ Such benefits will be in addition to

⁸²⁷ As a consequence of reducing risk, such funds may earn reduced returns.

⁸²⁸ See *supra* section II.B.1.

⁸²⁹ In addition, while some portfolio managers may find it burdensome to collaborate with a derivatives risk manager, to the extent that portfolio managers already consider the impact of trades on the fund's portfolio risk, we believe that having the involvement of a derivatives risk manager may typically make a portfolio manager's tasks more rather than less efficient.

⁸³⁰ For example, portfolio managers of actively-managed funds that are underperforming competing funds may have an incentive to increase risk exposures through use of derivatives in an effort to increase returns. This behavior may result in a fund also increasing risk beyond investor expectations. See also SIFMA AMG Comment Letter; ABA Comment Letter. (For theoretical motivation of such behaviors see, e.g., Keith C. Brown, W.V. Harlow, & Laura T. Starks, *Of Tournaments and Temptations: An Analysis of Managerial Incentives in the Mutual Fund Industry*, 51 J. FIN. 85 (1996), available at <https://www.onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-6261.1996.tb05203.x>; Judith Chevalier & Glenn Ellison, *Risk-Taking by Mutual Funds as a Response to Incentives*, 105 J. POL. ECON. 1167 (1997), available at https://www.jstor.org/stable/10.1086/516389?seq=1#metadata_info_tab_contents).

⁸³¹ See *supra* sections II.B.2.c and II.B.2.d; see also *supra* section II.C.2 (discussing the requirements that a fund's derivatives risk manager provide to the fund's board: (1) a written report, at least annually, providing a representation that the program is reasonably designed to manage the fund's derivatives risks and to incorporate the required elements of the program; and (2) a written report, at the frequency determined by the board, analyzing exceedances of the fund's risk guidelines and the results of the fund's stress tests and backtesting).

benefits derived from the VaR-based limit on fund leverage risk discussed below.⁸³² VaR analysis, while yielding a simple yet general measure of a fund's portfolio risk, does not provide a complete picture of a fund's financial risk exposures.⁸³³ Complementing VaR analysis with stress testing will provide a more complete understanding of the fund's potential losses under different sets of market conditions. For example, simulating potential stressed market conditions not reflected in historical correlations between fund returns and asset prices observed in normal markets may provide derivatives risk managers with important information pertaining to derivatives risks in stressed environments.⁸³⁴ By incorporating the potential impact of future economic outcomes and market volatility in its stress test analysis, a fund may be able to analyze future potential swings in its portfolio that may impact the fund's long-term performance. Recent episodes of market volatility related to the COVID-19 global health pandemic have highlighted the importance of analyzing such future potential swings in a fund's portfolio. This forward-looking aspect of stress testing will supplement the final rule's VaR analysis requirement, which will rely on historical data.

In addition, the final rule will require that a fund backtest the results of its VaR analysis no less frequently than weekly, which will assist funds in examining the effectiveness of the fund's VaR model. The final rule will require that, for each weekly backtesting period, the fund compare its actual gains or losses on each business day during the weekly period, with the fund's VaR calculated for each business day during the same weekly period.⁸³⁵ The weekly comparison will help identify days where the fund's portfolio losses exceed the VaR calculated for each day

⁸³² See *infra* section III.C.2

⁸³³ See *id.*

⁸³⁴ See *supra* section II.B.2.c (rule 18f-4 will require the program to provide for stress testing to “evaluate potential losses to the fund's portfolio in response to extreme but plausible market changes or changes in market risk factors that would have a significant adverse effect on the fund's portfolio, taking into account correlations of market risk factors as appropriate and resulting payments to derivatives counterparties”).

⁸³⁵ See *supra* section II.B.2.d.

during the week, as well as systematic over- or under-estimation of VaR, which would suggest that the fund may not be accurately measuring all significant, identifiable market risk factors.⁸³⁶

Commenters stated that weekly backtesting would be associated with reduced burdens compared to the more frequent daily backtesting requirement we proposed.⁸³⁷ We have not reduced our estimates from the Proposing Release of one-time and ongoing program-related costs as a result of the decreased backtesting frequency, however.⁸³⁸ Therefore, the cost estimates we provide below may overstate the costs of the final rule's backtesting requirement.⁸³⁹

Rule 18f-4 will also require that a fund's board of directors approve the designation of the fund's derivatives risk manager.⁸⁴⁰ We anticipate that this requirement, along with the derivatives risk manager's direct reporting line to the board, will result in effective communication between the board and the derivatives risk manager that will enhance oversight of the program to the benefit of the fund and its investors.

Rule 18f-4 will require that the derivatives risk manager provide the fund's board a written report at least once a year on the program's effectiveness as well as regular written reports at a frequency determined by the board that analyze exceedances of the fund's risk guidelines and the results of the fund's stress tests and backtests.⁸⁴¹ The board reporting requirements may facilitate the board's oversight of the fund and the operation of the derivatives risk management program, to the extent the fund does not have such regular reporting mechanisms already in place. In the event the derivatives risk manager encounters material risks that need to be escalated to the fund's board, the rule's provision that the derivatives risk

⁸³⁶ See *supra* footnote 212; see also *supra* section II.B.2.d for a discussion of comments the Commission received on the proposed backtesting requirement.

⁸³⁷ See *supra* footnote 222 and associated text.

⁸³⁸ See Proposing Release, *supra* footnote 1, at section III.C.1.

⁸³⁹ We anticipate that any cost savings compared to the proposal as a result of the decreased backtesting frequency will be small, as the development and implementation of processes for backtesting likely have a significant fixed-cost component.

⁸⁴⁰ See *supra* section II.C.1.

⁸⁴¹ See *id.*

manager must directly inform the board of these risks in a timely manner as appropriate may help prevent delays in resolving such risks.

Funds today employ a range of different practices, with varying levels of comprehensiveness and sophistication, for managing the risks associated with their use of derivatives.⁸⁴² We expect that compliance costs associated with the derivatives risk management program requirement will vary based on the fund's current risk management practices, as well as the fund's characteristics, including in particular the fund's investment strategy, and the nature and type of derivatives transactions used by the fund.

We understand that VaR models are widely used in the industry and that backtesting is commonly performed in conjunction with VaR analyses. As a result, we believe that many funds that will be required to establish derivatives risk management programs already have VaR models with backtesting in place. Moreover, the final rule's derivatives risk management program requirements, including stress testing and backtesting requirements are, generally, high-level and principles-based. As a result, as one commenter acknowledged, many funds' current risk management practices may already be in line with many of the rule's derivatives risk management program requirements or could be readily conformed without material change.⁸⁴³ Thus, the costs of adjusting funds current' practices and procedures to comply with the parallel requirements of final rule 18f-4 may be minimal for such funds.

Certain costs of the rule's derivatives risk management program may be fixed, while other costs may vary with the size and complexity of the fund and its portfolio allocation. For instance, costs associated with purchasing certain third-party data used in the program's stress tests may not vary much across funds. On the other hand, certain third-party services may vary in terms of costs based on the portfolio positions to be analyzed. Further, the extent to which a cost corresponding to the program is fixed or variable may also depend on the third-party service provider.

⁸⁴² See *supra* section III.B.4.

⁸⁴³ See Blackrock Comment Letter, at 8.

Larger funds or funds that are part of a large fund complex may incur higher costs in absolute terms but find it less costly, per dollar managed, to establish and administer a derivatives risk management program relative to a smaller fund or a fund that is part of a smaller fund complex. For example, larger funds may have to allocate a smaller portion of existing resources for the program, and fund complexes may realize economies of scale in developing and implementing derivatives risk management programs for several funds. In addition, smaller funds or those that are part of a smaller fund complex may find it more costly to appoint a derivatives risk manager, because they (1) may not have existing officers of the fund's investment advisers who are capable of fulfilling the responsibilities of the derivatives risk manager; (2) may have existing officers of the fund's investment advisers who are capable of fulfilling the responsibilities of the derivatives risk manager but may be overburdened with other existing responsibilities within the fund; or (3) may choose to hire a new officer or promote a current employee to fulfill this role.

We estimate that the one-time costs to establish and implement a derivatives risk management program will range from \$150,000 to \$500,000 per fund, depending on the particular facts and circumstances, including whether a fund is part of a larger fund complex and therefore may benefit from economies of scale.⁸⁴⁴ These estimated costs are attributable to the following activities: (1) assessing whether a fund is subject to the derivatives risk management program requirement; (2) analyzing the fund's current practices relative to the final rule's

⁸⁴⁴ We believe that the low end of this range is reflective of a fund that already has policies and procedures in place that could be readily adapted to meet the final rule's requirements. Such a fund would nevertheless incur costs associated with analyzing its current practices relative to the final rule's requirements and determining whether it is subject to the derivatives risk management program; some funds may also incur costs associated with analyzing whether and how they could modify their derivatives exposure in order to qualify as a limited derivatives user. We increased our estimate of the low end of this range compared to the proposal to account for these costs as well as to account for comments we received suggesting that the implementation of the program may be more burdensome than the Commission estimated at proposal and comments suggesting that requiring the fund's board of directors to approve the designation of the fund's derivatives risk manager would place increased burdens on the fund's board of directors. *See* Dechert Comment Letter I; IDC Comment Letter; *see also supra* sections II.C.1 and II.B. This increased estimate also takes into account our assumption that a number of funds and their boards may wish to employ outside legal services in connection with adopting and implementing the fund's derivatives risk management program as well as approving the derivatives risk manager. *See infra* sections IV.B.1, IV.B.2.

requirements; (3) developing risk guidelines and processes for stress testing, backtesting, internal reporting and escalation, and program review; (4) integrating and implementing the guidelines and processes described above; (5) preparing training materials and administering training sessions for staff in affected areas;⁸⁴⁵ (6) recruiting and hiring a derivatives risks manager, to the extent the fund is unable to consider an existing officer of the investment adviser that is equipped with the appropriate and relevant experience necessary to be selected for the role of derivatives risk manager; and (7) approval by the board of the fund's derivatives risk manager.⁸⁴⁶

We estimate that the ongoing annual program-related costs that a fund will incur range from 65% to 75% of the one-time costs to establish and implement a derivatives risk management program. Thus, a fund will incur ongoing annual costs that range from \$97,500 to \$375,000.⁸⁴⁷ These estimated costs are attributable to the following activities: (1) assessing, monitoring, and managing the risks associated with the fund's derivatives transactions; (2) periodically reviewing and updating (A) the program including any models or measurement tools (including any VaR calculation models) to evaluate the program's effectiveness and to reflect changes in risk over time, and (B) the appropriateness of any designated reference portfolio; (3) providing written reports to the fund's board; (4) additional staff training; and (5) the derivatives risk manager's base salary and compensation, to the extent a fund is unable to consider an existing officer of the investment adviser that is equipped with the appropriate and relevant experience necessary to be selected for the role of derivatives risk manager. Under the final rule, a fund that is a limited derivatives user will not be required to establish a derivatives risk management program.⁸⁴⁸ Based on an analysis of Form N-PORT filings, as well as financial

⁸⁴⁵ See also ProShares Comment Letter (stating that "employees will need to read and be trained on the policies and procedures.")

⁸⁴⁶ A fund that selects an existing officer of its investment adviser for the role of derivatives risk manager may incur costs associated with recruiting and hiring an additional officer to assume some or all of the tasks that previously were allocated to the officer who is selected as derivatives risk manager.

⁸⁴⁷ This estimate is based on the following calculations: $0.65 \times \$150,000 = \$97,500$; $0.75 \times \$500,000 = \$375,000$.

⁸⁴⁸ The estimates of the one-time and ongoing costs described in this section include the costs

statements filed with the Commission by BDCs, we estimate that about 21% of funds, or 2,766 funds total, will be required to implement a derivatives risk management program.⁸⁴⁹ As many funds belong to a fund complex and are likely to experience economies of scale, we expect that the lower end of the estimated range of costs (\$150,000 in one-time costs; \$97,500 in annual costs) better reflects the total costs likely to be incurred by those funds.⁸⁵⁰ In addition, we believe that many funds already have a derivatives risk management program in place that could be readily adapted (and also already have personnel on staff who could serve as derivatives risk manager) to meet the final rule’s requirements without significant additional cost.⁸⁵¹ However, as we do not have data to determine how many funds already have a program in place that will substantially satisfy the final rule’s requirements, and commenters did not provide any such data, we over-inclusively assume that all funds that will be required to establish a derivatives risk management program will incur a cost associated with this requirement. Based on these assumptions, we provide an upper-end estimate for total industry cost in the first year of \$684,585,000.⁸⁵²

2. VaR-Based Limit on Fund Leverage Risk

The final rule will generally impose a VaR-based limit on fund leverage risk on funds relying on the rule to engage in derivatives transactions.⁸⁵³ This outer limit is based on a relative VaR test that compares the fund’s VaR to the VaR of a “designated reference portfolio.” If the

associated with determining whether a fund is subject to the rule’s VaR and program requirements.

⁸⁴⁹ We estimate that about 21% of funds hold some derivatives and will not qualify as a limited derivatives user under the final rule.

⁸⁵⁰ A fund that uses derivatives in a complex manner, has existing risk management practices that are not commensurate with such use of derivatives, and may have to hire additional personnel to fulfill the role of derivatives risk manager will be particularly likely to experience costs at the upper end of this range.

⁸⁵¹ Prior to the proposal, one commenter indicated that implementing stress testing, which would be one of the required elements of the proposed derivatives risk management program, would be only slightly burdensome for 27% of respondents to a survey of ICI member firms and would be moderately burdensome for an additional 50% of respondents. *See* Proposing Release, *supra* footnote 1, at n.501.

⁸⁵² This estimate is based on the following calculation: 2,766 funds x (\$150,000 + \$97,500) = \$684,585,000.

⁸⁵³ *See supra* section II.D.

fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, the fund will be required to comply with an absolute VaR test.⁸⁵⁴ In either case a fund will apply the test at least once each business day.

The relative VaR test will limit a fund's VaR to 200% of the VaR of the fund's designated reference portfolio, unless the fund is a closed-end fund that has then-outstanding shares of a preferred stock issued to investors. For such closed-end funds, the VaR must not exceed 250% of the VaR of the fund's designated reference portfolio.⁸⁵⁵ The designated reference portfolio will have to be unleveraged—an unleveraged designated index or the fund's securities portfolio—and reflect the markets or asset classes in which the fund invests.⁸⁵⁶ By comparing the VaR of a fund's portfolio to that of an unleveraged reference portfolio, the relative VaR test restricts the incremental risk associated with a fund's portfolio relative to a similar but unleveraged investment strategy. In this sense, the relative VaR test restricts the degree to which a fund can use derivatives to leverage its portfolio.

The final rule will permit a fund to rely on the absolute VaR test only if the fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test. To comply with the absolute VaR test, the VaR of the fund's portfolio must not exceed 20% of the value of the fund's net assets, unless the fund is a closed-end fund that has then-outstanding preferred stock. For such closed-end funds, the VaR must not exceed 25% of the value of the fund's net assets.⁸⁵⁷

⁸⁵⁴ The final rule provides an exception from the rule's VaR test for limited derivatives users. *See supra* section II.E.

⁸⁵⁵ *See supra* section II.D.2 for a discussion of the comments we received and the data commenters provided on the relative VaR limit we proposed.

⁸⁵⁶ *See supra* section II.D.2.b. The final rule's definition of "designated index" also includes other requirements, as discussed above. *See id.* For example, a designated index cannot be administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used.

⁸⁵⁷ *See supra* section II.D.2.

The 20% absolute VaR limit is based on DERA staff analysis that calculated the VaR of the S&P 500 since inception that the Commission used to propose a 15% absolute VaR limit, adjusted consistent with the final rule's increases to the proposed relative VaR limit.⁸⁵⁸ Under the final rule, for example, a fund that uses the S&P 500 as its benchmark index would be permitted to have a VaR equal to 200% of the VaR of the S&P 500 if the fund also uses that index as its designated reference portfolio. The 20% absolute VaR test limit would therefore provide approximately comparable treatment for funds that rely on the absolute VaR test and funds that rely on the relative VaR test with a 200% limit and use the S&P 500 as their designated reference portfolio during periods where the S&P 500's VaR is approximately equal to the historical mean.⁸⁵⁹

One common critique of VaR is that it does not reflect the conditional distribution of losses beyond the specified confidence level.⁸⁶⁰ In other words, the VaR tests will not capture the size and relative frequency of losses in the “tail” of the distribution of losses beyond the measured confidence level.⁸⁶¹ As a result, two funds with the same VaR level could differ significantly in the magnitude and relative frequency of extreme losses, even though the probability of a VaR breach would be the same for the two funds. The Proposing Release contained a set of example calculations, based on a simplified portfolio, that illustrate this point.⁸⁶²

⁸⁵⁸ See *supra* section II.D.3 for a discussion of the comments we received and the data commenters provided on the absolute VaR limit we proposed.

⁸⁵⁹ DERA staff analyzed the historical returns of the S&P 500 index since inception. Computing VaR based on historical simulation using the parameters specified in the final rule, we find that the S&P 500's VaR had an average VaR of approximately 10.5%. The VaR of the index varied over time, with a minimum of approximately 4.1% attained for much of the first quarter of 1994 and a maximum of approximately 22.9% attained from late 1987 through the third quarter of 1990.

⁸⁶⁰ See *supra* footnote 295 and accompanying text.

⁸⁶¹ The term “relative frequency” here refers to the frequency of loss outcomes in the tail of the distribution relative to other loss outcomes that are also in the tail of the distribution. This relative frequency of the loss outcomes together with the magnitude of the associated losses describe the conditional distribution of losses in the tail of the distribution.

⁸⁶² See Proposing Release, *supra* footnote 1, at section IV.C.2.

As discussed in more detail above, the VaR tests are designed to address the concerns underlying section 18, but they are not a substitute for a fully-developed derivatives risk management program.⁸⁶³ Recognizing VaR's limitations, the final rule will also require the fund to adopt and implement a derivatives risk management program that, among other things, will require the fund to establish risk guidelines and to stress test its portfolio in part because of concerns that VaR as a risk management tool may not adequately reflect tail risks.

Below is an analysis using benchmark and other data that is an effort to produce estimates of how many funds (out of the 2,696) that we estimate will be subject to the final rule's VaR-based limit on fund leverage risk would have operated in exceedance of such limit.⁸⁶⁴ The analysis supporting these estimates relies on various assumptions that limit the applicability of the estimates to the population of funds subject to the final rule. More specifically, the analysis is limited in the following ways: (1) the estimated VaR is based on funds' historical portfolio and benchmark returns throughout the look-back period, rather than returns of the funds' current portfolio and composition of the benchmark index at the end of the look-back period, as will be required of funds under the final rule, (2) the calculations do not take into account the VaR of funds' securities portfolios, because we do not have historical data regarding the returns of those portfolios, and (3) the calculations generally assume that funds will use their primary prospectus benchmarks for purposes of the relative VaR test, even though the final rule permits them to use a different index or their own securities portfolio. Accordingly, the estimates approximate the effects of the final rule's VaR limits using the available information, and that approximation, as discussed below, may not reflect the actual manner in which the limits apply to funds under the final rule.

⁸⁶³ See *supra* footnote 297 and accompanying text.

⁸⁶⁴ This analysis is based on Morningstar data with three-year look-back periods ending in December 31, 2018 and June 30, 2020. DERA staff computed the VaR of each fund and that of the related index using historical simulation from three years of prior daily return data. Staff generally computed the relative VaR test based on a fund's primary prospectus benchmark. In cases where historical return data for the primary prospectus benchmark was not available or where the primary prospectus benchmark did not appear to capture the markets or asset classes in which a fund invests, DERA staff instead used a broad-based unleveraged index that captures a fund's markets or asset classes or a broad-based U.S. equity index.

The analysis estimates VaR based on the historical returns of fund portfolios and benchmark indexes because it would be impractical for staff to estimate VaR based on the exact composition, as of the end of the look-back period, for every fund's portfolio and benchmark index. As a result, the VaR estimates we derive reflect changes to the composition of funds' portfolios and the benchmark indexes throughout the look-back period rather than just at the end of the look-back period.⁸⁶⁵ Funds computing their own VaRs, in contrast, would analyze their current portfolios and benchmark indexes, if applicable, at the time of calculation, taking into consideration at least three years of historical market data. We also were not able to evaluate VaR levels of funds' securities portfolios because we do not have historical data regarding the returns of funds' securities portfolios, as defined in the final rule.

We analyzed the effects of the final rule's VaR limits for two three-year lookback periods: the first ending on December 31, 2018 and the second ending on June 30, 2020. The former period is the period we analyzed in the Proposing Release and reflects a relatively calm market environment.⁸⁶⁶ The latter period is more recent and includes parts of the more volatile market environment following the onset of COVID-19.

For the three-year period ending on December 31, 2018, we did not estimate that any funds would fail the relative VaR test from the pool of funds that would have been subject to the VaR-based limit.⁸⁶⁷ For the three-year period ending on June 30, 2020, which included a period of significantly heightened market volatility, our analysis yields an estimate of 383 funds that may fail the relative VaR test from the pool of funds that will be subject to the VaR-based limit.⁸⁶⁸ None of the 383 funds are closed-end funds that have outstanding shares of preferred

⁸⁶⁵ For example, our methodology would under-estimate VaR for volatility-targeting funds in a period of low volatility that was preceded by a period of higher volatility earlier in the look-back period. This is because these funds increase the size of their positions when market risks are lower in order to target a constant level or range of volatility. *See also supra* footnote 451 and accompanying text.

⁸⁶⁶ *See* Proposing Release, *supra* footnote 1, at section III.C.2.

⁸⁶⁷ In the Proposing Release we identified six funds that would have failed the relative VaR test at the lower 150% limit we proposed. *See id.*

⁸⁶⁸ For the purposes of this analysis, we assumed that all leveraged/inverse funds with exposures up to 200% will be able to satisfy the relative VaR test.

stock and thus are subject to the higher 250% relative-VaR based limit.⁸⁶⁹ Differences between the composition of the benchmarks and the funds' portfolios—together with heightened market volatility during the lookback period—likely contributed to some funds being estimated to fail the VaR tests. In addition, this estimate is limited by the information available to the Commission, which generally compared the funds' VaRs to the VaRs of the funds' primary prospectus benchmarks.⁸⁷⁰ To the extent that these funds' derivatives risk managers would have determined that the fund's securities portfolio or an index other than the disclosed benchmark would have been more appropriate for purposes of computing the relative VaR test, some of these funds could have satisfied the relative VaR test. Conversely, if the indexes selected by the funds, or their securities portfolios, had lower volatility than the index selected here, funds that are estimated to have passed the relative VaR test may not ultimately satisfy that test under the final rule.

In addition, some of these funds could have applied the absolute VaR test if the funds' derivatives risk managers reasonably determined that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test. Most of the funds with VaRs exceeding 200% of the relevant index VaR (351 of 383) had portfolio VaRs below the final rule's 20% absolute VaR limit. Conversely, we recognize that some funds that are estimated to pass the relative VaR test could have applied the absolute VaR test and may not have satisfied that test.⁸⁷¹

⁸⁶⁹ We identified one closed-end fund that has outstanding shares of preferred stock that is subject to the VaR-based limit with a relative VaR level that exceeds 200% but not 250%. Thus, this fund would not be able to satisfy the relative VaR test absent the higher limit for closed-end funds that have outstanding shares of preferred stock.

⁸⁷⁰ See *supra* footnote 858.

⁸⁷¹ DERA staff also examined funds' absolute VaR levels in isolation as a result of the volatile market environment following the onset of COVID-19. Specifically, we observe that 396 funds that we estimated would satisfy the relative VaR test had absolute VaR levels above 20% for the three-year lookback period ending on June 30, 2020. However, we believe this observation is of limited value in estimating the impact of the absolute VaR test. First, because the relative VaR test is the default test under the final rule, we do not believe that this observation is indicative of the number of funds that will not be able to satisfy the rule's VaR-based limit on fund leverage risk because they rely on the absolute VaR test. Second, because we lack the information necessary to identify the subset of funds that are likely to rely on the absolute VaR test under the

One commenter provided the results from a survey that asked respondents to evaluate whether they would anticipate relying on the proposed absolute or relative VaR test and whether they would satisfy their applicable test, assuming various alternative specifications of limits for these tests.⁸⁷² The commenter reported that 0.9% of funds that indicated that they use derivatives and do not qualify as a limited derivatives user (under the proposed definition) would not have been able to satisfy their applicable VaR test at the end of 2019 using a 200% limit for the relative VaR test and a 20% limit for the absolute VaR test. Using the staff estimate of the number of funds that will be subject to the VaR-based test under the final rule, this result implies that 24 funds would have failed their applicable VaR test.⁸⁷³ The commenter also asked respondents to evaluate their VaR levels during a stressed market period, and reported that 1.8% of funds would have failed their applicable VaR test (using assumed 200% and 20% levels for the relative VaR test and absolute VaR test, respectively).⁸⁷⁴ Using the staff estimate of the number of funds that we estimate will be subject to the VaR-based test under the final rule, this result implies that 49 funds would have failed their applicable VaR test.⁸⁷⁵ We believe that these survey-based results of the proposed VaR-based tests using a 200% limit for the relative VaR test and a 20% limit for the absolute VaR test help inform an assessment of the final rule's likely effects and complement the staff's own analysis of the VaR-based tests under the final rule.

Two commenters stated that the VaR-based limit on fund leverage risk would not benefit investors, because only a relatively small number of funds will have to adjust their portfolios in order to comply with the VaR based limit on leverage risk.⁸⁷⁶ However, we believe that the VaR-based limit on fund leverage risk will benefit investors by establishing an outer bound on fund

rule, it is not clear that this observation is representative of the likelihood that such funds would exceed the absolute VaR limit.

⁸⁷² See ICI Comment Letter.

⁸⁷³ This number is based on the following calculation: 2,696 funds x 0.9% = 24 funds.

⁸⁷⁴ The commenter indicated that the survey did not specify a specific stressed period but that the majority of respondents included the global financial crisis. See ICI Comment Letter.

⁸⁷⁵ This number is based on the following calculation: 2,696 funds x 1.8% = 49 funds.

⁸⁷⁶ See ProShares Comment Letter and Direxion Comment Letter.

leverage risk, which will prevent funds from using strategies that expose investors to a degree of fund leverage risk that is inconsistent with the investor protection concerns of section 18.

Funds that will have to adjust their portfolios to comply with the VaR-based limit on fund leverage risk will incur associated trading costs. If a fund has to adjust its portfolio so significantly that it could no longer pursue its investment strategy, such a fund may also lose investors or, if it chooses to cease operating, incur costs associated with unwinding the fund.

In addition, funds could be required to adjust their portfolios to comply in the future and, if so, will incur associated trading costs. For example, as market conditions change, a fund's VaR could exceed the VaR-based limit, especially if a fund relies on the absolute VaR test. The final rule's VaR tests also will eliminate the flexibility that funds currently have to leverage their portfolios to a greater extent than the VaR tests permit. Although funds currently may not be exercising this flexibility, they may nevertheless value the ability to increase leverage beyond the rule's VaR-based limit. While, on the one hand, the VaR-based tests impose costs on funds by restricting the strategies they can employ, the limit on fund leverage risk will benefit fund investors, to the extent that it prevents these investors from experiencing losses from a fund's increased risk exposure that is prohibited by the VaR-based limit on fund leverage risk.

By establishing a bright-line limit on the amount of leverage risk that a fund can take on using derivatives, the final rule may make some funds and their advisers more comfortable with using derivatives. As a result, some funds that currently use derivatives to an extent that will result in the fund's VaR being below the limit may react by increasing the extent of their derivatives usage.

The requirement could also indirectly result in changing the amount of investments in funds. On the one hand, the final rule could attract additional investment, if investors become more comfortable with funds' general level of riskiness as a result of funds' compliance with an outside limit on fund leverage risk. On the other hand, to the extent that investors currently expect funds to limit their risk to levels below those which the limits will produce, or to the extent that the rule's bright-line limit on the amount of leverage risk leads some funds to increase

their derivatives usage, the limits may result in investors re-evaluating how much risk they are willing to take and reducing their investments in funds. Due to a lack of data regarding current investor expectations about fund risk, however, we are unable to predict which of the two effects will more likely dominate the other.

As the requirements will prevent funds that are subject to the outer limit on fund leverage risk from offering investment strategies that exceed the outer limit, those investors who prefer to invest in such funds because they value the increased potential for gains that is generally associated with riskier investment strategies may see their investment opportunities restricted by the final rules.⁸⁷⁷ As a result, such investors may instead invest in alternative products that can provide leveraged market exposure but will not be subject to the VaR-based limit on fund leverage risk of rule 18f-4 and incur any transactions costs associated with changing their investments.⁸⁷⁸ Examples of such alternative products include existing leveraged/inverse funds with exposures exceeding 200%, as well as products that are not registered investment companies, such as alternative investment vehicles (including the listed commodity pools that would have been subject to the proposed sales practices rules), exchange-traded notes (“ETNs”), and structured products.⁸⁷⁹ Some of these alternatives may present additional risks. For example, some investors could choose to invest in ETNs, which are subject to issuer default. Alternatively, such investors, particularly institutional ones, may instead borrow themselves or trade on margin to achieve leverage.

Funds that will be subject to the VaR-based limit on fund leverage risk will incur the cost of determining their compliance with the applicable VaR test at least once each business day. Part of these costs will be associated with obtaining the necessary data required for the VaR

⁸⁷⁷ See also ProShares Comment Letter (mentioning a “reduction of investment opportunities for investors” as a result of the VaR-based test.)

⁸⁷⁸ See also ProShares Comment Letter (mentioning “costs incurred if [investors] switched to alternative investment vehicles [from funds that cannot satisfy the VaR-based test].”)

⁸⁷⁹ As part of the staff review discussed above, the staff will review the effectiveness of the existing regulatory requirements in protecting investors who invest in leveraged/inverse products and other complex investment products. See *supra* section II.F.4.

calculation, to the extent that a fund does not already have this data available. Funds implementing the relative VaR test and using a designated index as the reference portfolio will likely incur larger data costs compared to funds implementing the absolute VaR test, as the absolute VaR test will require funds to obtain data only for the VaR calculation for the fund's portfolio, whereas the relative VaR test in this case also will require funds to obtain data for the VaR calculation for their designated index. In addition, some index providers may charge licensing fees to funds for including indexes in their regulatory documents or for access to information about the index's constituent securities and weightings.⁸⁸⁰ Funds may avoid these index-related costs by using their securities portfolio. That approach may, however, involve some operational burdens in that it would require a fund to be able to identify and exclude the fund's derivatives transactions, as defined in the rule, in order to calculate the VaR of the fund's securities and other investments.

Funds that do not already have systems to perform the VaR calculations in place will also incur the costs associated with setting up these systems or updating existing systems.⁸⁸¹ Both the data costs and the systems costs will likely be larger for funds that use multiple types of derivatives, use derivatives more extensively, or otherwise have more complicated derivatives portfolios, compared to funds with less complicated derivatives portfolios.

Larger funds or funds that are part of a large fund complex may incur higher costs in absolute terms but find it less costly, per dollar managed, to perform VaR tests relative to a smaller fund or a fund that is part of a smaller fund complex. For example, larger funds may

⁸⁸⁰ We understand that industry practices around licensing indexes for regulatory purposes vary widely, with some providers not charging any fees and others charging fees in excess of \$10,000 per year.

⁸⁸¹ In advance of the proposal, one commenter indicated that implementing a UCITS VaR test will be only slightly burdensome for 45% of respondents to a survey of ICI member firms and would be moderately burdensome for an additional 34% of respondents. The commenter also indicated that respondents commonly reported that the burden will increase, in some cases very substantially, if a VaR test has different parameters or is more prescriptive than UCITS VaR. *See* 2019 ICI Comment Letter. As the requirements of the VaR test in the final rule are generally consistent with existing market practice, including that of UCITS funds, the results of this survey therefore support our view that many funds will likely experience efficiencies in implementing the VaR test.

have to allocate a smaller portion of existing resources for the VaR test and fund complexes may realize economies of scale in implementing systems to compute VaR. In particular, the costs associated with implementing or updating systems to calculate VaR will likely only be incurred once at the level of a fund complex, as such systems can be used to perform VaR tests for all funds in the complex that are subject to the VaR test requirement. Similarly, larger fund complexes may incur lower costs associated with purchasing data on a per-fund basis, to the extent that the VaR calculations for multiple funds in the complex partially or completely require the same data. For these reasons, smaller funds or funds that are not part of a large fund complex may be particularly likely to find it more economical to rely on a third-party vendor to calculate VaR compared to incurring the associated systems and data costs directly.

Under the final rule, a fund that holds derivatives that is not a limited derivatives user will generally be subject to the VaR-based limit on fund leverage risk.⁸⁸² Based on an analysis of Form N-PORT filings and financial statements filed with the Commission by BDCs, we estimate that about 21% of funds, or 2,696 funds total, will be required to implement VaR tests. We estimate that the incremental annual cost associated with the VaR test will range from \$5,000 to \$100,000 per fund, depending on the particular facts and circumstances, including whether the fund currently computes VaR; whether the fund is implementing the relative or absolute VaR test; and whether a fund that is part of a larger complex may be able to realize economies of scale or compliance efficiencies with UCITS requirements.⁸⁸³ Funds that currently already compute VaR, and especially funds that are managed by an adviser (or are managed by an

⁸⁸² The final rule will permit leveraged/inverse funds in operation today that seek investment results in excess of the 200% leverage risk limit, and that cannot comply with the relative VaR test, to continue operating at their current leverage levels, provided they meet certain requirements. *See supra* section II.F.5.

⁸⁸³ One commenter criticized our estimates for the incremental annual cost associated with the VaR test, and pointed out that our estimates are lower than the estimated range of \$60,000 to \$180,000 per fund that the Commission provided in the 2015 Proposing Release. *See* ProShares Comment Letter. The commenter did not, however, provide data to inform more precise cost estimates. Conversely, other commenters said that many advisers that use derivatives already use risk management platforms that include VaR tools, indicating that many funds may experience lower marginal costs than we estimated in 2015. *See supra* footnotes 729–732 and accompanying text. We are therefore not revising the cost estimates we provided in the Proposing Release.

affiliate of an adviser) that manages UCITS funds, will be particularly likely to experience costs at the very low end of this range.⁸⁸⁴ Assuming that the midpoint of this range reflects the cost to the average fund subject to the VaR requirement, we estimate a total additional annual industry cost of \$141,540,000.⁸⁸⁵

In addition, a fund that currently operates in a manner that could result in the fund's portfolio VaR being just under the final rule's limit on fund leverage risk may need to alter its portfolio during periods of increased market volatility in order to avoid falling out of compliance with this limit. We expect such a scenario to be more likely for a fund that will rely on the absolute VaR test, because the relative VaR test will allow a fund to operate with a higher portfolio VaR when the VaR of its designated reference portfolio increases.

A fund that determines to eliminate some of its leverage risk associated with derivatives in order to comply with the VaR-based limit on leverage risk might do so through unwinding or hedging its derivatives transactions or through some other means. These portfolio adjustments may be costly, particularly in conditions of market stress and reduced liquidity, such as the recent experience during COVID-19. The final rule will, however, give a fund the flexibility to mitigate these potential costs by not requiring the fund to exit positions or change its portfolio if it is out of compliance with its VaR test. If a fund determines that it is not in compliance with the applicable VaR test, the final rule provides that a fund must come back into compliance promptly after such determination, in a manner that is in the best interests of the fund and its shareholders.⁸⁸⁶ If the fund is not in compliance within five business days, the rule requires the

⁸⁸⁴ We estimate that there are 190 registered investment advisers that are registered with a EU financial regulatory authority and that are reported as the investment adviser, or sub-adviser, for a registered fund. *See supra* footnote 816.

⁸⁸⁵ This estimate is based on the following calculation: 2,696 funds x 0.5 x (\$5,000 + \$100,000) = \$141,540,000. Some funds may find it more cost effective to restrict their use of derivatives in order to be able to rely on the final rule's exception for limited derivatives users compared to complying with the VaR-based limit on fund leverage risk. *See supra* section II.E; *infra* section III.C.3. As in the proposal, we do not have data that would allow us to quantify the costs and benefits that define the tradeoff for any particular fund of changing its use of derivatives in order to qualify for the limited derivatives user exception, and commenters did not provide any such data. Thus, we are still unable to quantify how many funds would make this choice.

⁸⁸⁶ *See* rule 18f-4(c)(2)(ii).

derivatives risk manager to report to the fund's board of directors certain specified information about the fund coming back into compliance, as well as requiring him or her to analyze the circumstances that caused the fund to be out of compliance and update as appropriate program elements to address those circumstances. If the fund remains out of compliance with the applicable VaR test for thirty calendar days since the exceedance, the derivatives risk manager's written report must update the initial report to the board explaining how and by when he or she reasonably expects the fund will come back into compliance, and the derivatives risk manager must update the board of directors on the fund's progress in coming back into compliance at regularly scheduled intervals at a frequency determined by the board.⁸⁸⁷ These provisions of the final rule collectively provide some flexibility for a fund that is out of compliance with the VaR test to make any portfolio adjustments. The final rule expressly requires a fund's prompt coming back into compliance with its applicable VaR test to be in a manner that is in the best interests of the fund and its shareholders. This provision recognizes the investor protection concerns arising from the harm and costs to funds and their shareholders if funds were forced to exit derivatives transactions immediately or at the end of the five-day period. Under this more flexible approach, funds will have the ability to avoid some of the costs that otherwise could result from a fund being forced to exit its derivatives transactions within a short timeframe.

3. Limited Derivatives Users

Rule 18f-4 includes an exception from the VaR-based limit on fund leverage risk and program requirements for limited derivatives users.⁸⁸⁸ The exception will be available for a fund that limits its derivatives exposure to 10% of its net assets, excluding for this purpose derivative transactions that are used to hedge certain currency and/or interest rate risks. The final rule also provides certain adjustments for interest rate derivatives and options, in computing derivatives

⁸⁸⁷ See rule 18f-4(c)(2)(iii); see also *supra* section II.G.2 (discussing the requirement to submit a confidential report to the Commission if the fund is out of compliance with the applicable VaR test for five business days).

⁸⁸⁸ See *supra* section II.E for a discussion of the comments we received on the proposed limited derivatives user exception and for a discussion of the final rule's exclusions of certain hedging transactions and offsetting of closed-out derivatives positions.

exposure, and permits funds to exclude positions closed out with the same counterparty. A fund relying on the exception is required to adopt and implement policies and procedures reasonably designed to manage the fund's derivatives risks.⁸⁸⁹

We expect that the risks and potential impact of these funds' derivatives use may not be as significant, compared to those of funds that do not qualify for the exception.⁸⁹⁰ Therefore, we believe that a principles-based policies and procedures requirement would appropriately address these risks. We believe that investors in funds that use derivatives in a limited manner will benefit from the requirement, which we anticipate will reduce, but not eliminate, the frequency and severity of derivatives-related losses for such funds. In addition, to the extent that the final rule's framework is more comprehensive than funds' current practices, the requirement may result in more effective risk management across funds and increased fund industry stability.

We estimate that the one-time costs would range from \$15,000 to \$100,000 per fund, depending on the particular facts and circumstances, including whether a fund is part of a larger fund complex; the extent to which the fund uses derivatives within the parameters of the limited derivatives user exception, including whether the fund uses more complex derivatives; and the fund's current derivatives risk management practices.⁸⁹¹ These estimated costs are attributable to the following activities: (1) assessing whether a fund is a limited derivatives user, which may include determining whether a fund's derivatives positions are used to hedge certain currency and/or interest rate risks or are closed out with the same counterparty; (2) analyzing the fund's

⁸⁸⁹ See *supra* section II.E.4 for a discussion of the final rule's two alternative paths for remediation if a fund's derivatives exposure exceeds the 10% derivatives exposure threshold for five business days.

⁸⁹⁰ See *supra* footnote 488 and accompanying and immediately-following text.

⁸⁹¹ We believe that the low end of this range is reflective of a fund that already has policies and procedures in place that could be readily adapted to meet the final rule's requirements. Such a fund would nevertheless incur costs associated with analyzing its current practices relative to the final rule's requirements and determining whether it could qualify as a limited derivatives user. We increased our estimate of the low end of this range compared to the proposal to account for this cost as well as to account for the potential that funds may implement additional policies and procedures related to the changes we have incorporated into the final rule to address exceedances of the 10% derivatives exposure threshold. This increased estimate also takes into account our assumption that a number of funds that qualify as limited derivatives users may wish to employ outside legal services in connection with adopting and implementing policies and procedures reasonably designed to manage their derivatives risks. See *infra* section IV.B.6.

current practices relative to the final rule's requirements; (3) developing policies and procedures reasonably designed to manage a fund's derivatives risks; (4) integrating and implementing the policies and procedures; and (5) preparing training materials and administering training sessions for staff in affected areas.

We estimate that the ongoing annual costs that a fund that is a limited derivatives user will incur range from 65% to 75% of the one-time costs associated with these requirements. Thus, we estimate that a fund will incur ongoing annual costs that range from \$9,750 to \$75,000.⁸⁹² These estimated costs are attributable to the following activities: (1) assessing, monitoring, and managing the risks associated with the fund's derivatives transactions; (2) periodically reviewing and updating a fund's policies and procedures; (3) additional staff training; and (4) preparing a written report to the fund's board if a fund exceeds the 10% derivatives exposure threshold and does not reduce its exposure within five business days.

Based on an analysis of Form N-PORT filings, as well as financial statements filed with the Commission by BDCs, we estimate that about 19% of funds, or 2,437 funds total, will qualify as limited derivatives users.

Because many funds belong to a fund complex and are likely to experience economies of scale, we expect that the lower end of the estimated range of costs (\$15,000 in one-time costs; \$9,750 in annual costs) better reflects the total costs likely to be incurred by many funds. In addition, commenters suggested that many funds already have policies and procedures in place to manage certain risks associated with their derivatives transactions.⁸⁹³ We believe that these policies and procedures could be readily adapted to meet the final rule's requirements without significant additional cost. However, we do not have data to determine how many funds already have such policies and procedures in place that will substantially satisfy the final rule's requirements, and commenters did not provide any such data. All funds that seek to qualify as

⁸⁹² This estimate is based on the following calculations: $0.65 \times \$15,000 = \$9,750$; $0.75 \times \$100,000 = \$75,000$.

⁸⁹³ See Fidelity Comment Letter; IAA Comment Letter.

limited derivatives users also will need to evaluate both the final rule and their current policies and procedures to identify any needed modifications. We therefore assume that all funds that seek to qualify as limited derivatives users will incur a cost associated with this requirement. Based on these assumptions, we estimate the total industry cost in the first year of \$60,315,750, but we believe that this estimate is likely over-inclusive for the reasons stated above.⁸⁹⁴

Some funds may change how they use derivatives in order to qualify for the limited derivatives user exception and thereby avoid the potentially increased compliance cost associated with the final rule's VaR and program requirements. For example, a fund with derivatives exposure just below 10% of its net assets may forego taking on additional derivatives positions, while a fund with derivatives exposure just above 10% of its net assets might close out some existing derivatives positions. As a result, the final rule's exception for limited derivatives users may reduce the extent to which some funds use derivatives.⁸⁹⁵

4. Reverse Repurchase Agreements and Similar Financing Transactions

Reverse repurchase agreements and similar financing transactions represent secured loans, which can be used to introduce leverage into a fund's portfolio just like other forms of borrowings, or derivatives. Accordingly, the final rule permits a fund to either choose to limit its reverse repurchase and other similar financing transaction activity to the applicable asset coverage limit of the Act for senior securities representing indebtedness, or a fund may instead treat them as derivative transactions. A fund's election will apply to all of its reverse repurchase

⁸⁹⁴ This estimate is based on the following calculation: 2,437 funds x (\$15,000 + \$9,750) = \$60,315,750. This cost estimate assumes that none of the funds that currently do not hold any derivatives will choose to establish and implement policies and procedures reasonably designed to manage the fund's derivatives risks in anticipation of a future limited use of derivatives. Notwithstanding this assumption, we acknowledge some funds that currently do not use derivatives may still choose to establish and implement such policies and procedures prophylactically in order to preserve the flexibility to engage in a limited use of derivatives on short notice.

⁸⁹⁵ As we do not have data that allow us to quantify the costs and benefits that define the tradeoff for any particular fund of changing its use of derivatives in order to qualify for the limited derivatives user exception, and commenters did not provide any such data, we are unable to estimate how many funds will make this choice.

agreements and similar financing transactions so that all such transactions are subject to a consistent treatment under the final rule.⁸⁹⁶

Today, funds rely on the asset segregation approach that Release 10666 describes with respect to reverse repurchase agreements, which funds may view as separate from the limitations established on bank borrowings (and other senior securities that are evidence of indebtedness) by the asset coverage requirements of section 18.⁸⁹⁷ As a result, the degree to which funds can engage in reverse repurchase agreements under the final rule may differ from the baseline.

A fund that engages in both reverse repurchase agreements and bank borrowings (or similar transactions), in excess of the asset coverage requirements of section 18, may be affected by the rule's requirements. If such a fund chose to treat its reverse repurchase and other similar financing transaction activity under the applicable asset coverage limit of the Act for senior securities representing indebtedness, the fund would be required to reduce the size of its activity to satisfy this limit. Conversely, such a fund could choose to treat its reverse repurchase and other similar financing transaction activity as derivatives for all purposes of the final rule. Whether and how this election would affect a fund would depend on the amount of other derivatives and the degree to which the fund engages in reverse repurchase agreements and similar financing transactions. This election could cause a fund that otherwise did not engage in any derivatives transactions to be required to adopt and implement policies and procedures reasonably designed to manage the fund's derivatives risks in order to qualify as a limited derivatives user (assuming that the fund's use of reverse repurchase agreements and similar financing transactions was limited to 10% of its net assets).⁸⁹⁸ Similarly, a fund that otherwise could qualify as a limited derivatives user (because it otherwise engaged in only a limited

⁸⁹⁶ Rule 18f-4(d)(1)(i) and (ii).

⁸⁹⁷ See *supra* section II.H.

⁸⁹⁸ As discussed further below in this section, we did not identify any funds that used reverse repurchase agreements and bank borrowings in combined amounts that exceed the asset coverage requirement that also did not otherwise hold any derivatives. Nevertheless, this fact pattern could affect some funds in the future.

amount of derivatives transactions) may no longer be able to rely on this exception to the final rule's VaR and program requirements.

To the extent that funds today separately analyze their asset coverage requirements with respect to reverse repurchase agreements under Release 10666 and bank borrowings and similar senior securities under section 18, the treatment of reverse repurchase agreements under the final rule could have the effect of limiting the overall scale of these transactions. In addition, if a fund does not qualify as a limited derivatives user due to its other investment activity or its treatment of reverse repurchase agreements and similar financing transactions as derivatives, any portfolio leveraging effect of reverse repurchase agreements, similar financing transactions, and borrowings will also be restricted indirectly through the VaR-based limit on fund leverage risk. As a result, a fund could be restricted through the VaR-based limit on fund leverage risk from investing the proceeds of borrowings through reverse repurchase agreements to the full extent otherwise permitted by the asset coverage requirements in section 18 if the fund does not qualify as a limited derivatives user.

DERA staff analyzed funds' use of reverse repurchase agreements and borrowings using Form N-PORT filings as well as financial statements filed with the Commission by BDCs. Based on the staff's analysis of Form N-PORT filings, we estimate that about 0.27% of funds, or 35 funds total, used these transactions in combined amounts that exceeded the asset coverage requirement.⁸⁹⁹ All of these funds also otherwise engaged in derivatives transactions, but only one of them would no longer qualify as a limited derivatives user if it elected to treat its reverse repurchase transactions as derivatives for all purposes of the final rule.⁹⁰⁰

⁸⁹⁹ In our review of form N-PORT filings, we observed that several of the funds that used reverse repurchase agreements and similar financing transactions (bank borrowings and similar securities) in combined amounts that exceeded 50% of net assets already exceeded the 50% limit for either repurchase agreements, similar financing transactions (bank borrowings and similar securities, or both, when considered separately. In our review of financial statements filed by the Commission by BDCs, we observed that no BDCs exceeded the asset coverage requirement.

⁹⁰⁰ For purposes of our analysis in other parts of the economic analysis (specifically, sections III.C.1-III.C.3), we assumed that this fund would not qualify for the limited derivatives user exception.

5. Treatment of Existing Leveraged/Inverse Funds that Seek to Provide Leveraged or Inverse Market Exposure Exceeding 200% of the Return of the Relevant Index

Rule 18f-4 permits existing leveraged/inverse funds that cannot satisfy the final rule's relative VaR test and that seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index as of October 28, 2020 to continue operating, provided they meet certain requirements. This exception is limited to funds currently in operation, and would therefore not apply to any new funds.

Because the final rule limits this provision to funds currently in operation, the number of funds with exposure above 200% may fall over time, to the extent that fund sponsors remove existing funds from the market. This may particularly affect funds that are less popular or become less popular with investors over time. For the same reason, the final rule may limit the growth (or lead to a decline) of assets managed by leveraged/inverse funds with a market exposure above these limits over time. At the same time, because leveraged/inverse funds that are already in operation today will be permitted to continue operating at their current exposure levels and because fund sponsors will likely be hesitant to remove funds relying on the exception from the market (because the exception applies only to funds currently in operation), the final rule is not likely to have a significant immediate effect on the number of these funds and the size of the assets they manage.

Any reduction in the variety (including future variety) of leveraged/inverse funds with exposures exceeding 200% will affect investors. While investors generally benefit from increased investment opportunities, the effects on any particular investor also depend on how well an investor is able to evaluate the characteristics and risks of leveraged/inverse funds, particularly those with exposures exceeding 200%. On the one hand, there is a body of academic literature that provides empirical evidence that some retail investors may not fully understand the risks inherent in their investment decisions and not fully understand the effects of

compounding.⁹⁰¹ In addition, the Commission received some comments on the proposal suggesting that retail investors do not understand the unique risks of leveraged/inverse funds.⁹⁰² On the other hand, we also received a large number of comments from individual investors asserting they understand the risks involved in these funds.⁹⁰³

The final rule's treatment of leveraged/inverse funds with exposures above 200% could benefit some investors, to the extent that the rule has the effect of reducing the number of investors in these funds who are not capable of evaluating the risks they pose. These benefits would be limited, however, to the extent that they overlap with the effects of current requirements that apply to investment advisers or broker-dealers, including the best interest standard of conduct for broker-dealers under Regulation Best Interest and the fiduciary obligations of investment advisers.⁹⁰⁴ Conversely, the final rule may impose a cost on those investors who are capable of evaluating the risks these funds pose, by limiting the investment opportunities available to those investors.⁹⁰⁵

⁹⁰¹ See, e.g., Annamaria Lusardi & Olivia S. Mitchell, *The Economic Importance of Financial Literacy: Theory and Evidence*, 52 J. ECON. LITERATURE 5 (2014), available at <https://www.aeaweb.org/articles?id=10.1257/jel.52.1.5>, which reviews a body of recent survey-based work indicating that many retail investors have limited financial literacy. As the Commission pointed out in the Proposing Release, this literature studies investor inattention to financial products generally and does not specifically examine retail investors' understanding of leveraged/inverse funds. Two commenters stated that the arguments provided in the Proposing Release do not represent evidence that investors misunderstand the risks of leveraged/inverse funds. See Comment Letter of Chester Spatt, Ph.D. (Mar. 31, 2020); Flannery Comment Letter. One of those commenters specifically raised the limitations of this literature. See Flannery Comment Letter. We continue to believe that this literature may be informative of investors' understanding of leveraged/inverse funds, as it includes an examination of investors' understanding of interest compounding, which may directly apply in the context of the (generally) daily compounding feature of leveraged/inverse funds.

⁹⁰² See *supra* footnote 572 and accompanying text.

⁹⁰³ See *supra* footnote 571 and accompanying text. See also Flannery Comment Letter, *supra* footnote 901 (finding a negative historical relationship between the returns of some leveraged/inverse funds and subsequent changes in outstanding shares and arguing that this relationship is consistent with some investors using leveraged/inverse funds for short-term trading strategies).

⁹⁰⁴ See *supra* section II.F.2.

⁹⁰⁵ See, e.g., Flannery Comment Letter, *supra* footnote 901 (stating that an investor may rationally hold a leveraged/inverse fund for multi-day holding periods and that leveraged/inverse funds provide a cost-efficient means of achieving investors' objectives).

The final rule also includes a requirement that a fund that seeks to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index disclose in its prospectus that it is not subject to the final rule's limit on fund leverage risk. We believe that this requirement may benefit investors and the market, by providing transparency regarding which funds are exempt from rule 18f-4's limit on fund leverage fund risk.

As discussed below in section IV.B.4, rule 18f-4 requires an over-200% leveraged/inverse fund currently in operation to disclose in its prospectus that it is not subject to the VaR-based limits on fund leverage risks. We estimate that the total industry cost associated with this disclosure requirement in the first year will be \$71,400.⁹⁰⁶

6. Amendments to Rule 6c-11 under the Investment Company Act and Rescission of Exemptive Relief for Leveraged/Inverse ETFs

Existing leveraged/inverse ETFs rely on exemptive relief, which the Commission has not granted to a leveraged/inverse ETF sponsor since 2009. We are amending the provision in rule 6c-11 that excludes leveraged/inverse ETFs from its scope to allow a leveraged/inverse ETF to operate under rule 6c-11 if the fund complies with the applicable requirements of rule 18f-4. As a result, fund sponsors will be permitted to operate a leveraged/inverse ETF subject to the conditions in rules 6c-11 and 18f-4 without obtaining an exemptive order.

The amendments to rule 6c-11 will benefit any fund sponsors seeking to launch leveraged/inverse ETFs whose target multiple is equal to or less than 200% of its reference index that did not obtain the required exemptive relief due to the Commission's moratorium on granting such relief. A fund sponsor planning to seek exemptive relief from the Commission to form and operate a leveraged/inverse ETF that could operate under rules 6c-11 and 18f-4 will

⁹⁰⁶ The burdens associated with this estimate are all paperwork-related burdens, and thus they are also estimated in the Paperwork Reduction Act Analysis section of this release. *See infra* section IV.B.4. The estimate is based on the following calculations: First, we calculate the one-time cost to an over-200% leveraged/inverse fund for the disclosure, to be 1.5 hours x \$312 (compliance manager) + 1.5 hours x \$368 (compliance attorney) = \$468 + \$552 = \$1,020 per year. The total industry cost to over-200% leveraged/inverse funds, in the first year, is (70 over-200% leveraged/inverse funds) x \$1,020 = \$71,400.

also no longer incur the cost associated with applying for an exemptive order.⁹⁰⁷ To the extent that the amendments result in new leveraged/inverse ETFs with exposures not exceeding 200% coming to market, the industry-wide assets under management of such leveraged/inverse ETFs could increase and investors who are able to evaluate the risks they pose could benefit from an increase in investment choices. Conversely, the amendment may also have the effect of increasing the number of investors in these funds who may not be capable of evaluating the risks they pose.⁹⁰⁸

Because our amendments to rule 6c-11 will permit leveraged/inverse ETFs to rely on that rule, we also are rescinding the exemptive orders the Commission has previously granted to sponsors of leveraged/inverse ETFs. As a result, existing and future leveraged/inverse ETFs will operate under a consistent regulatory framework with respect to the relief necessary to operate as an ETF. We believe that the costs to leveraged/inverse ETFs of complying with the conditions of rule 6c-11 instead of those contained in their exemptive orders will be minimal (other than the costs of complying with rule 18f-4, which we discuss separately), as we anticipate that all existing leveraged/inverse ETFs will be able to continue operating as they do currently, while also being required to comply with rule 6c-11's requirements for additional website disclosures and basket asset policies and procedures.⁹⁰⁹ While we do anticipate that these funds will incur costs from having to comply with the applicable provisions of rule 18f-4, as referenced in the

⁹⁰⁷ In the ETFs Adopting Release, we estimated that the direct cost of a typical fund's application for ETF relief (associated with, for example, legal fees) is approximately \$100,000. As exemptive applications for leveraged/inverse ETFs are significantly more complex than those of the average fund, we estimate that the direct costs of an application for leveraged/inverse ETF relief amounts to approximately \$250,000. *See* ETFs Adopting Release, *supra* footnote 76, at nn.537-539 and accompanying text.

⁹⁰⁸ *See supra* section III.C.5 for a discussion of investors' understanding of leveraged/inverse funds and the comments we received on this topic in the context of leveraged/inverse funds with exposures exceeding 200%, for which the effects of these fund's unique characteristics are more pronounced due to the higher levels of exposure they seek to provide.

⁹⁰⁹ In this section as well as in section III.D below, we have accounted for the costs and benefits to leveraged/inverse ETFs as a result of the removal of the current exclusion of these funds from rule 6c-11. We believe that the additional considerations the Commission analyzed in the ETFs Adopting Release for ETFs other than leveraged/inverse ETFs that were included in the scope of rule 6c-11 at adoption apply substantially similarly to leveraged/inverse ETFs. *See* ETFs Adopting Release, *supra* footnote 76.

amendments to rule 6c-11, we estimate these costs in the subsections of this section III.C that discuss the costs and benefits of rule 18f-4. Sponsors of leveraged/inverse ETFs with existing exemptive orders describing exposures exceeding 200% will no longer be able to launch additional leveraged/inverse ETFs with exposures exceeding this limit. The economic effects of this restriction are discussed above.⁹¹⁰ Additional economic considerations that the treatment of leveraged/inverse ETFs presents with regards to efficiency and competition are discussed below in section III.D.

7. Unfunded Commitment Agreements

Rule 18f-4 will permit a fund to enter into unfunded commitment agreements to make certain loans or investments if it reasonably believes, at the time it enters into such an agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements, in each case as they come due.⁹¹¹ While a fund should consider its unique facts and circumstances, the final rule will prescribe certain specific factors that a fund must take into account in having such a reasonable belief.

We continue to believe that the final rule's requirements are consistent with current industry practice.⁹¹² As a result, we do not believe that the rule's treatment of unfunded commitment agreements represents a change from the baseline, although we acknowledge that there may be some variation in the specific factors that funds consider today, as well as the potential for some variation between those factors and those prescribed in the final rule. Because we believe that the final rule's approach is consistent with general industry practices, we believe this requirement will not lead to significant economic effects.⁹¹³

⁹¹⁰ See *infra* section III.C.5.

⁹¹¹ See *supra* section II.I

⁹¹² See *supra* footnote 763 and accompanying text.

⁹¹³ See *supra* footnote 763 and accompanying text.

8. Recordkeeping

Rule 18f-4 includes certain recordkeeping requirements.⁹¹⁴ Specifically, the final rule will require a fund to maintain certain records documenting its derivatives risk management program's written policies and procedures, along with its portfolio's stress test results, VaR backtesting results, any internal reporting or escalation of material risks under the program, and periodic reviews of the program.⁹¹⁵ It will also require a fund to maintain records of any materials provided to the fund's board of directors in connection with approving the designation of the derivatives risk manager and any written reports relating to the derivatives risk management program.⁹¹⁶

A fund that will be required to comply with the VaR-based limit on fund leverage risk will also have to maintain records documenting the determination of: its portfolio's VaR; the VaR of its designated reference portfolio, as applicable; its VaR ratio (the value of the VaR of the Fund's portfolio divided by the VaR of the designated reference portfolio), as applicable; and any updates to any of its VaR calculation models and the basis for any material changes to its VaR models.⁹¹⁷ The rule also will require a fund to keep records of any written reports provided to the board that the rule requires regarding the fund's non-compliance with the applicable VaR test.⁹¹⁸ A fund that will be a limited derivatives user under the final rule will have to maintain a written record of its policies and procedures that are reasonably designed to manage derivatives risks, as well any written reports to the fund's board regarding the fund's exceeding the exception's 10% derivatives exposure threshold.⁹¹⁹ In light of the final rule providing two separate treatment options for a fund that enters into a reverse repurchase agreement or similar financing transactions, a fund must also maintain a written record documenting whether the fund

⁹¹⁴ See *supra* section II.J.

⁹¹⁵ Rule 18f-4(c)(i)(A).

⁹¹⁶ Rule 18f-4(c)(6)(i)(B).

⁹¹⁷ Rule 18f-4(c)(6)(i)(C).

⁹¹⁸ Rule 18f-4(c)(6)(i)(B).

⁹¹⁹ Rule 18f-4(c)(6)(i)(D).

is treating these transactions, as set forth in the rule, under (1) an asset coverage requirements approach or (2) a derivatives transactions treatment approach.⁹²⁰ Finally, a fund engaging in unfunded commitment agreements will be required to maintain records documenting the basis for its reasonable belief regarding the sufficiency of its cash and cash equivalents to meet its obligations with respect to each unfunded commitment agreement, with such a record made each time it enters such an agreement.⁹²¹ Rule 18f-4 will require funds to maintain required records for a period of five years (the first two years in an easily accessible place).⁹²²

We believe that these requirements will increase the effectiveness of the Commission's oversight of the fund industry, which will, in turn, benefit investors. Further, the requirement to keep records documenting the derivatives risk management program, including records documenting periodic review of the program and written reports provided to the board of directors relating to the program, will help our staff evaluate a fund's compliance with the derivatives risk management program requirements. We anticipate that these recordkeeping requirements will generally not impose a large additional burden on funds, as most funds would likely choose to keep such records, even absent the requirement to do so, in order to support their ongoing administration of the derivatives risk management program and their compliance with the associated requirements.

As discussed below in section IV.B.7, our estimated average one-time and ongoing annual costs associated with the recordkeeping requirements take into account the fact that some funds, such as those that can rely on the final rule's limited derivatives user exception, may incur less extensive recordkeeping costs relative to other funds that use derivatives, or the other transactions that rule 18f-4 addresses, more substantially. We estimate that the total industry cost for the final rule's recordkeeping requirement in the first year will equal \$53,012,728.⁹²³

⁹²⁰ Rule 18f-4(d)(2).

⁹²¹ See rule 18f-4(e)(2).

⁹²² See rule 18f-4(c)(6)(ii); rule 18f-4(d)(2); rule 18f-4(e)(2).

⁹²³ The burdens associated with this estimate are all paperwork-related burdens, and thus they are also estimated in the Paperwork Reduction Act Analysis section of this release. See *infra* section

9. Amendments to Fund Reporting Requirements

a. Form N-PORT and Form N-CEN

We are amending Form N-PORT to include a new reporting item on limited derivatives users' derivatives exposure, which will be non-public because we are collecting this information for regulatory purposes.⁹²⁴ This new item requires a limited derivatives user to report: (1) the fund's derivatives exposure; and (2) the fund's derivatives exposure attributable to currency or interest rate derivatives entered into and maintained by the fund for hedging purposes. Furthermore, if a fund relying on that exception has derivatives exposure exceeding 10% of the fund's net assets, and this exceedance persists beyond the five-business-day period that the final rule provides for remediation, the fund will have to report the number of business days beyond the five-business-day remediation period that its derivatives exposure exceeded 10% of net

IV.B.7. The total industry cost estimate is then based on the following calculations: First, 9 hours x \$63 (general clerk) = \$567, 9 hours x \$96 (senior computer operator) = \$864, and 9 hours x \$368 (compliance attorney) = \$3,312, for a total of \$567 + \$864 + \$3,312 + (\$1,800 for initial external cost burden) = \$6,543, which is the one-time cost per non-limited derivatives user fund for establishing recordkeeping policies and procedures for derivatives risk management program and VaR requirements; Second, 16 hours x \$63 (general clerk) = \$1,008, 16 hours x \$96 (senior computer operator) = \$1,536, and 16 hours x \$368 (compliance attorney) = \$5,888, for a total of \$1,008 + \$1,536 + \$5,888 = \$8,432, which is the annual ongoing recordkeeping cost per non-limited derivatives user fund for derivatives risk management program and VaR requirements; Third, 1.5 hours x \$63 (general clerk) = \$95, 1.5 hours x \$96 (senior computer operator) = \$144, and 1.5 hours x \$368 (compliance attorney) = \$552, for a total of \$95 + \$144 + \$552 + (\$1,800 for initial external cost burden) = \$2,591, which is the one-time cost per limited derivatives user fund for establishing recordkeeping policies and procedures; Fourth, 2 hours x \$63 (general clerk) = \$126, 2 hours x \$96 (senior computer operator) = \$192, and 2 hours x \$368 (compliance attorney) = \$736, for a total of \$126 + \$192 + \$736 = \$1,054, which is the annual ongoing recordkeeping cost per limited derivatives user fund or a fund engaging in unfunded commitment agreements; Fifth, 1.5 hours x \$63 (general clerk) = \$95, 1.5 hours x \$96 (senior computer operator) = \$144, and 1.5 hours x \$368 (compliance attorney) = \$552, for a total of \$95 + \$144 + \$552 = \$791, which is the one-time cost per fund engaging in unfunded commitment agreements or reverse repurchase agreements for establishing recordkeeping policies and procedures; Lastly, 1 hour x \$63 (general clerk) = \$63, 1 hour x \$96 (senior computer operator) = \$96, and 1 hour x \$368 (compliance attorney) = \$368, for a total of \$63 + \$96 + \$368 = \$527, which is the annual ongoing recordkeeping cost per fund engaging in reverse repurchase agreements; Total industry costs associated with recordkeeping requirements are estimated as: (2,766 funds which cannot rely on the limited derivatives user exception) x (\$6,543 + \$8,432) = \$41,420,850; (2,437 funds which can rely on the limited derivatives user exception) x (\$2,591 + \$1,054) = \$8,882,865; (1,339 funds engaging in unfunded commitment agreements) x (\$791 + \$1,054) = \$2,470,455; (181 funds engaging in reverse repurchase agreements) x (\$791 + \$527) = \$238,558 for a total of \$53,012,728.

assets.⁹²⁵ In addition, we are adopting a new Form N-PORT reporting item related to the VaR tests we are adopting, in which funds that are subject to the final rule's VaR-based limit on fund leverage risk will have to report certain information related to their VaR.⁹²⁶

We also are amending Form N-CEN to require a fund relying on the final rule to identify that it is relying on the rule in the first instance, as well as: (1) whether it is a limited derivatives user excepted from the rule's program requirement and VaR tests; (2) whether it is a leveraged/inverse fund as defined in the rule; (3) whether it has entered into reverse repurchase agreements or similar financing transactions, either under the provision of rule 18f-4 that requires a fund to comply with the asset coverage requirements of section 18 or under the provision that requires a fund to treat such transactions as derivative transactions under the final rule; (4) whether it has entered into unfunded commitment agreements under rule 18f-4; and (5) whether it is relying on the provision of rule 18f-4 that addresses investment in when-issued and forward-settling securities. All new information reported in Form N-CEN pursuant to this rulemaking will be made publicly available. These additional reporting requirements will not apply to BDCs, which do not file reports on Form N-CEN or Form N-PORT.⁹²⁷

To the extent that the information that we will require funds to report on Forms N-PORT and N-CEN is not currently available, the requirements that funds make such information available periodically on these forms will improve the ability of the Commission to oversee reporting funds. It also will allow the Commission and its staff to oversee and monitor reporting funds' compliance with the final rule and help identify trends in reporting funds' use of derivatives. The expanded reporting also will increase the ability of the Commission staff to

⁹²⁵ *Id.*

⁹²⁶ Specifically, this information will include the fund's median daily VaR for the reporting period. Funds subject to the relative VaR test during the reporting period also will have to report: (1) the name of the fund's designated index or a statement that the fund used its securities portfolio as its designated reference portfolio; (2) the index identifier; and (3) the fund's median daily VaR Ratio for the reporting period. Finally, all funds that are subject to the limit on fund leverage risk also will have to report the number of exceptions that the fund identified as a result of the backtesting of its VaR calculation model. Information about a fund's designated index will be made publicly available, but not a fund's median daily VaR, median daily VaR ratio, and backtesting information. *See supra* section II.G.1.b.

⁹²⁷ *See supra* footnote 625.

identify trends in investment strategies and fund products in reporting funds as well as industry outliers.⁹²⁸

Investors, third-party information providers, and other potential users may also experience benefits from the amendments to Forms N-PORT (that relate to information that will be publicly available) and N-CEN, as they will require the disclosure of additional information that is not currently available elsewhere and that may allow the users of this data to better differentiate funds.

As discussed below in section IV.D, our estimated average one-time and ongoing annual costs associated with the amendments to Forms N-PORT take into account the fact that only certain funds—those that rely on the limited derivatives user exception, and those that are subject to the VaR-based limit on fund leverage risk in final rule 18f-4—will incur these costs. We estimate that the total industry cost for these new Form N-PORT reporting requirements in the first year will equal \$18,033,889.⁹²⁹ We also estimate that the total industry cost for all registered

⁹²⁸ The structuring of the information in Form N-PORT will improve the ability of Commission staff to compile and aggregate information across all reporting funds, and to analyze individual funds or a group of funds, and will increase the overall efficiency of staff in analyzing the information.

⁹²⁹ The burdens associated with this estimate are all paperwork-related burdens, and thus they are also estimated in the Paperwork Reduction Act Analysis section of this release. *See infra* section IV.D. The total industry estimate is based on the following calculations: First, (2 hours x \$368 (compliance attorney) + 2 hours x \$334 (senior programmer) = \$1,404), which is the average, one-time cost per limited derivatives user to comply with the new N-PORT requirements of derivatives exposure information in the first reporting quarter of the fiscal year; Second, (3 hours x \$368 (compliance attorney) + 3 hours x \$334 (senior programmer) = \$2,106 per year), which is the ongoing cost per limited derivatives user to comply with the new N-PORT requirements of derivatives exposure information in the final three reporting quarters of the fiscal year; Third, (2 hours x \$368 (compliance attorney) + 2 hours x \$334 (senior programmer) = \$1,404), which is the average, one-time cost per fund to comply with the new N-PORT requirements of VaR-related information in the first reporting quarter of the fiscal year; Fourth, (3 hours x \$368 (compliance attorney) + 3 hours x \$334 (senior programmer) = \$2,106 per year), which is the ongoing cost per fund to comply with the new N-PORT requirements of VaR-related information in the final three reporting quarters of the fiscal year; Lastly, (0.01 hours x \$368 (compliance attorney) + 0.01 hours x \$334 (senior programmer) = \$7), which is the ongoing cost per limited derivatives that reports exceedances of 10% derivatives exposure threshold in the fiscal year. The total industry cost for these reporting requirements in the first year is: ((2,437 registered funds that are limited derivatives users and required to provide information about their derivatives exposure and exceedances of the 10% threshold on N-PORT) x (\$1,404 + \$2,106 + \$7) = \$8,570,929) + (2,696 registered funds subject to the VaR-based limit on fund leverage risk in rule 18f-4 x (\$1,404 + \$2,106) = \$9,462,960) = \$18,033,889.

funds associated with these new Form N-CEN reporting requirements in the first year will equal \$775,570.⁹³⁰

b. Amendments to Current Reporting Requirements

We are also adopting current reporting requirements for funds that will rely on rule 18f-4 and will be subject to the VaR-based limit on fund leverage risk. Specifically, if a fund is subject to the relative VaR test, and the VaR of its portfolio exceeds 200% or 250% (depending on whether the fund is a closed-end fund for which the higher threshold is applicable) of the VaR of its designated reference portfolio for five business days, the fund will be required to file a non-public report on Form N-RN.⁹³¹ The report must include the following information: (1) the dates on which the fund's portfolio VaR exceeded 200% or 250% of the VaR of the designated reference portfolio; (2) the fund portfolio's VaR for each of these days; (3) the VaR of the designated reference portfolio for each of these days; (4) the designated index or statement that the fund used its securities portfolio as its designated reference portfolio; and (5) the index identifier, if applicable. The fund also will have to file a report on Form N-RN when it is back in compliance with its applicable VaR test.⁹³² Similarly, if a fund is subject to the absolute VaR test, and its absolute VaR exceeds 20% or 25% (as applicable) of the fund's net asset value for five business days, the fund will be required to file a comparable report on Form N-RN and a report when the fund is back in compliance.⁹³³

We anticipate that the enhanced current reporting requirements could produce significant benefits. For example, when a fund is out of compliance with the VaR-based limit on fund

⁹³⁰ The burdens associated with this estimate are all paperwork-related burdens, and thus they are also estimated in the Paperwork Reduction Act Analysis section of this release. *See infra* section IV.F. The estimate is based on the following calculations: First, we calculate the ongoing annual cost for a registered fund required to prepare amendments to Form N-CEN, which is 0.2 hours x \$368 (compliance attorney) + 0.2 hours x \$334 (senior programmer) = \$73.6 + \$66.8 = \$140.4 per year; Lastly, the total industry cost for all registered funds associated with this reporting requirement in the first year is (5,524 registered funds required to prepare a report on Form N-CEN as amended) x \$140.4 = \$775,570.

⁹³¹ As proposed, we are requiring all funds that are subject to rule 18f-4's limit on fund leverage risk to file current reports on Form N-RN regarding VaR test breaches. *See also supra* footnote 688.

⁹³² *See supra* footnote 682.

⁹³³ *See supra* footnote 685.

leverage risk, this may indicate that a fund is experiencing heightened risks as a result of a fund's use of derivatives transactions. Such breaches also could indicate market events that are drivers of potential derivatives risks across the fund industry and therefore complement other sources of information related to such market events for the Commission. As a result, we believe that the final rule's current reporting requirement will increase the effectiveness of the Commission's oversight of the fund industry by providing the Commission with current information regarding potential increased risks and stress events, which in turn will benefit investors.⁹³⁴

As discussed below in section IV.E, our estimated average cost burdens associated with the amendments to Form N-RN take into account that only certain funds—those that are out of compliance with the VaR-based limit on fund leverage risk that Form N-RN describes—will be required to file reports on Form N-RN, as amended. We estimate that the total industry cost for this reporting requirement in the first year will be \$77,652.⁹³⁵

We do not believe there will be any potential indirect costs associated with filing Form N-RN, such as spillover effects or the potential for investor flight due to a VaR test breach (to the extent that investors would leave a fund if they believed a fund's VaR test breaches indicate that a fund has a risk profile that is inconsistent with their investment goals and risk tolerance), because Form N-RN filings will not be publicly disclosed.⁹³⁶ Because the Form N-RN filing requirements will be triggered by events that are part of a fund's requirement to determine compliance with the applicable VaR test at least daily, any monitoring costs associated with Form N-RN are included in our estimates of the compliance costs for rule 18f-4 above.

⁹³⁴ See *supra* section II.G.2 for a discussion of the comments we received on the proposed current reporting requirements.

⁹³⁵ The burdens associated with this estimate are all paperwork-related burdens, and thus they are also estimated in the Paperwork Reduction Act Analysis section of this release. See *infra* sections IV.E and V.D.2.b. This estimate is based on the assumption that 27 funds will have to file reports on Form N-RN per year and corresponds to a cost of \$2,876 for each filing fund (\$1,438 per filing, and a fund will have to file two reports per breach incident: one to report the breach, and one when the fund is back in compliance with the VaR test (\$1,438 x 2 = \$2,876)).

⁹³⁶ See also *supra* footnote 697 and accompanying text (discussing that a fund may not engage in “fire sales” to avoid filing a report on Form N-RN.)

10. When-Issued and Forward-Settling Transactions

The final rule includes a provision that will permit funds, as well as money market funds, to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, subject to conditions.⁹³⁷ This provision reflects our view that the potential for leveraging is limited in these transactions when they meet the conditions in this provision. We do not believe that this provision will result in a significant change in the extent to which funds and money market funds engage in these transactions. For example, money market funds will continue to be able to invest in when-issued U.S. Treasury securities under this provision notwithstanding that these investments trade on a forward basis involving a temporary delay between the transaction's trade date and settlement date. We therefore do not expect these amendments to result in significant costs to funds, as well as money market funds.⁹³⁸

D. Effects on Efficiency, Competition, and Capital Formation

This section evaluates the impact of the final rules on efficiency, competition, and capital formation. We are unable to quantify these effects, however, because we lack the information necessary to provide a reasonable estimate. For example, we are unable to predict how the final rules will change investors' propensity to invest in funds and ultimately affect capital formation. Therefore, much of the discussion below is qualitative in nature, although where possible we attempt to describe the direction of the economic effects.

1. Efficiency

Rule 18f-4 in conjunction with the rescission of Release 10666 may make derivatives use more efficient for certain funds, including for those funds that will qualify as limited derivatives

⁹³⁷ See *supra* sections I.C. and II.A.

⁹³⁸ Money market funds may be required to make certain disclosure changes to their prospectuses. The burdens associated with this estimate are all paperwork-related burdens, and thus they are also estimated in the Paperwork Reduction Act Analysis section of this release. See *infra* sections IV.B.5 and IV.B.7. We estimate that the total industry cost for disclosure changes for money market funds in the first year would equal \$285,600. The estimate is based on the following calculations: First, we calculate the one-time cost for disclosure changes for money market funds, which is 3 hours x \$312 (compliance manager) + 3 hours x \$368 (compliance attorney) = \$936 + \$1,104 = \$2,040 per year; The total industry cost for disclosure changes for money market funds, in the first year, is (420 registered money market funds) x \$2,040 = \$856,800.

users. Specifically, funds' current asset segregation practices may provide a disincentive to use derivatives for which notional amount segregation is the practice, even if such derivatives would otherwise provide a lower-cost method of achieving desired exposures than purchasing the underlying reference asset directly.⁹³⁹ For example, a fund seeking to sell credit default swaps to take a position in an issuer's credit risk may currently choose not to do so because of the large notional amounts that the fund would segregate for that specific derivatives position. The final rule therefore could increase efficiency by mitigating current incentives for funds to avoid use of certain derivatives (even if foregoing the use of those derivatives would entail cost and operational efficiencies).

In addition, the final rules may change the degree to which some funds choose to use derivatives generally or the degree to which funds use certain derivatives over others.⁹⁴⁰ Changes in the degree to which certain derivatives are used by funds could affect the liquidity and price efficiency of these derivatives. Although unaddressed in the academic literature, we expect an increase in the use of derivatives to correspond to an increase in derivatives market liquidity as more derivatives contracts may be easily bought or sold in markets in any given period, as well as an increase in price efficiency since information regarding underlying securities (and other factors that affect derivatives prices) may be better reflected in the prices of derivative contracts.

Changes in the degree to which certain derivatives are used could also affect the pricing efficiency and liquidity of securities underlying these derivatives and those of related securities.

⁹³⁹ See *supra* section III.B.3 (for a description of funds' current asset segregation practices).

⁹⁴⁰ Specifically, (1) as discussed in the previous paragraph, funds may transact in more notional-value based derivatives as a result of removing the incentive distortion of notional- vs. market-value asset segregation under funds' current asset segregation practices; (2) new potential funds may reduce their use of derivatives transactions to satisfy the VaR-based limit on fund leverage risk (see *supra* section III.C.2); (3) existing funds may change their use of derivatives transactions to respond to risks identified after adopting and implementing their derivatives risk management programs (see *supra* section III.C.1); (4) both existing and new potential funds may increase their use of derivatives transactions as a result of the exemptive rule's bright-line limits on leverage risk (see *supra* section III.C.2); and (5) the use of derivatives transactions of leveraged/inverse funds with exposure exceeding 200% may decrease, to the extent that the final rule has the effect of limiting the growth (or leading to a decline) of assets managed by these funds over time as a result of limiting leveraged/funds with exposures above this limit to those currently in operation (see *supra* section III.C.5). Overall, the effect of the final rules on funds use of derivatives transactions is ambiguous and depends on the type of derivatives transaction.

For example, one paper provides evidence that the introduction of credit default swap contracts decreases the liquidity and price efficiency of the equity security of the issuer referenced in the swap.⁹⁴¹ Conversely, the paper also observes that the introduction of exchange-traded stock option contracts improves the liquidity and price efficiency of the underlying stocks.

The final rule's VaR-based limit on fund leverage risk will also establish a bright-line limit on the amount of leverage risk that a fund can take on using derivatives.⁹⁴² As we stated in the Proposing Release, to the extent that funds are more comfortable with managing their derivatives exposures to a clear outside limit, this could improve the efficiency of funds' portfolio risk management practices.⁹⁴³ One commenter disagreed with this assessment, stating that a bright-line limit would not improve the efficiency of funds' portfolio risk management practices.⁹⁴⁴ However, the commenter did not provide any data or evidence that contradicts the possibility that funds may find it more efficient to manage to clearly defined limits than the current approach. We therefore continue to believe that some funds may be able to manage portfolio risk more efficiently in the presence of a clear outside limit, as compared to the baseline, which provides less clear and uniform limitations on funds' derivatives use owing to its development on an instrument-by-instrument basis through a combination of Commission guidance in Release 10666, staff no-action letters, and other staff guidance.

⁹⁴¹ This paper analyzed NYSE-listed firms and observed that, all else equal, equity markets become less liquid and equity prices become less efficient when single-name credit default swap contracts are introduced, while the opposite results hold when equity options are listed on exchanges. Ekkehart Boehmer, Sudheer Chava, & Heather E. Tookes, *Related Securities and Equity Market Quality: The Case of CDS*, 50 J. FIN. & QUANTITATIVE ANALYSIS 509 (2015), available at <https://www.cambridge.org/core/journals/journal-of-financial-and-quantitative-analysis/article/related-securities-and-equity-market-quality-the-case-of-cds/08DE66A250F9950FA486AE818D5E0341>. The latter result, that traded equity options are associated with more liquid and efficient equity prices, is consistent with several other academic papers. See, e.g., Charles Cao, Zhiwu Chen, & John M. Griffin, *Informational Content of Option Volume Prior to Takeovers*, 78 J. BUS. 1073 (2005), as well as Jun Pan & Allen M. Potesman, *The Information in Option Volume for Future Stock Prices*, 19 REV. FIN. STUD. 871 (2006). The effects described in the literature are based on studies of the introduction of derivative securities and may therefore apply differently to changes in the trading volume of derivatives securities that may occur as a result of the final rule.

⁹⁴² See *supra* section III.C.2.

⁹⁴³ See Proposing Release, *supra* footnote 1, at section III.D.1.

⁹⁴⁴ See ProShares Comment Letter.

In addition, the recordkeeping elements of rule 18f-4 will facilitate efficient evaluation of compliance with the rule while also providing the Commission with information that may be useful in assessing market risks associated with derivatives products. Moreover, the amendments to fund's current reporting requirements could facilitate the Commission's oversight of funds subject to rule 18f-4 with fewer resources.⁹⁴⁵

The amendments to Forms N-PORT and N-CEN will allow investors, to the extent that they use the information, to better differentiate between funds based on their derivatives usage.⁹⁴⁶ As a result, investors will be able to more efficiently evaluate the effects of a fund's use of derivatives as part of its investment strategies, allowing them to make better-informed investment decisions.

In addition, the final rules may affect market quality for some of the investments held by leveraged/inverse ETFs, to the extent that the rule changes the amount and composition of investments by leveraged/inverse ETFs as a whole. Specifically, the academic literature to date provides some evidence, albeit inconclusive, that leveraged/inverse ETFs' rebalancing activity may have an impact on the price and volatility of the constituent assets that make up the ETFs. For example, one paper empirically tests whether the rebalancing activity of leveraged/inverse ETFs impacts the price and price volatility of underlying stocks.⁹⁴⁷ The authors find a positive association, suggesting that rebalancing demand may affect the price and price volatility of component stocks, and may reduce the degree to which prices reflect fundamental value of the component stocks. As leveraged/inverse ETFs commonly use derivatives to rebalance their portfolios, similar effects could also extend to underlying derivatives, although we are not aware of any academic literature that has examined the effects of leveraged/inverse ETFs' rebalancing activity on derivatives markets. Conversely, another paper argues that the existing literature that studies the effect of leveraged/inverse ETFs' rebalancing activity on the constituent asset prices

⁹⁴⁵ See *supra* section II.G.2.

⁹⁴⁶ See *supra* section III.C.9.a.

⁹⁴⁷ See Qing Bai, Shaun A. Bond & Brian Hatch, *The Impact of Leveraged and Inverse ETFs on Underlying Real Estate Returns*, 43 REAL ESTATE ECON. 37 (2015).

does not control for the effect of the creation and redemption transactions (*i.e.*, fund flows) by authorized participants.⁹⁴⁸ The paper presents evidence that positively leveraged/inverse ETFs tend to have capital flows in the opposite direction of the underlying index, and inverse leveraged/inverse ETFs tend to have capital flows in the same direction as the underlying index, suggesting that investor behavior may attenuate the effect of leveraged/inverse ETFs' rebalancing activity on the prices of underlying securities and derivatives.⁹⁴⁹ We are unable to determine, however, which holdings of leveraged/inverse ETFs are likely to be positively affected and which may be negatively affected, as we lack the information necessary to predict the effect that the amendments to rule 6c-11 and the prohibition on launching new funds with exposures above 200% that cannot satisfy rule 18f-4's relative VaR test will have on the size and composition of leveraged/inverse ETFs' portfolios.

2. Competition

Certain aspects of the final rules may have an impact on competition.⁹⁵⁰ Certain of these potential competitive effects result from the final rule imposing differential costs on different funds. Specifically: (1) large fund complexes may find it less costly to comply per fund with the new requirements of rule 18f-4 as a whole;⁹⁵¹ (2) funds that already have robust derivatives risk management practices in place and funds whose advisers already employ someone with the relevant expertise to serve as the fund's derivatives risk manager may incur lower costs associated with the rule's derivatives risk management program requirements;⁹⁵² (3) funds that qualify as limited derivatives users will generally incur lower compliance costs associated with

⁹⁴⁸ See Ivan T. Ivanov & Stephen Lenkey, *Are Concerns About Leveraged ETFs Overblown?*, (FEDS, Working Paper No. 2014-106, 2014).

⁹⁴⁹ The literature we are aware of focuses on leveraged/inverse ETFs and does not study similar effects of leveraged/inverse mutual funds, although both types of funds generally engage in similar rebalancing activity. As a result, similar effects may be attributable to leveraged/inverse mutual funds.

⁹⁵⁰ See *supra* sections III.B.1 and III.B.5 for an overview of the baseline of the fund industry.

⁹⁵¹ See *supra* sections III.C.1 and III.C.2.

⁹⁵² See *supra* section III.C.1.

the rule than funds that will not qualify for this exception;⁹⁵³ (4) unlike leveraged/inverse funds with exposures not exceeding 200%, leveraged/inverse funds with exposures in excess of this limit will not be subject to the rule's VaR-based limit on fund leverage risk and will therefore not incur the increased compliance costs associated with this requirement;⁹⁵⁴ (5) funds that will comply with the relative VaR test would generally incur higher compliance costs than those that will comply with the absolute VaR test;⁹⁵⁵ and (6) BDCs are not subject to the additional reporting requirements on Forms N-CEN or N-PORT and will therefore not incur the increased compliance costs that will be imposed on filers of these forms.⁹⁵⁶ To the extent that investors believe that the funds that will incur lower compliance burdens and the funds that will incur higher compliance burdens under the rule are substitutes, the rule may result in a competitive advantage for funds with the lower compliance burden to the extent that a lower burden makes such funds less costly to operate.

The final rule may also put funds that are subject to the outer limit on fund leverage risk at a competitive disadvantage compared to alternative products that can provide leveraged market exposure but will not be subject to the VaR-based limit on fund leverage risk of rule 18f-4, such as existing leveraged/inverse funds with exposures exceeding 200% that satisfy the conditions to the exception from the VaR-based limit on fund leverage risk for such funds, alternative investment vehicles (including the listed commodity pools that would have been subject to the proposed sales practices rules), exchange-traded notes, and structured products.⁹⁵⁷

The Commission has not provided exemptive relief to new prospective sponsors of leveraged/inverse ETFs since 2009.⁹⁵⁸ The amendments to rule 6c-11 will allow other leveraged/inverse ETFs with exposures at or below 200% to enter the leveraged/inverse ETF

⁹⁵³ See *supra* section III.C.3.

⁹⁵⁴ See *supra* section II.F.5.

⁹⁵⁵ See *supra* section III.C.2.

⁹⁵⁶ See *supra* section III.C.9.a.

⁹⁵⁷ See also *supra* section III.C.2.

⁹⁵⁸ See *supra* text following footnote 821.

market, subject to the conditions in rules 6c-11 and 18f-4, and therefore help promote a more level playing field. This will likely lead to more competition among leveraged/inverse ETFs (primarily among those with exposures at or below 200%) and between leveraged/inverse ETFs and other products that investors may perceive as substitutes, such as leveraged/inverse mutual funds. This increase in competition could be significant, as the leveraged/inverse ETF market is very concentrated; currently, only two fund sponsors operate leveraged/inverse ETFs. Fees for leveraged/inverse ETFs and substitute products, such as leveraged/inverse mutual funds, could fall as a result of any such increase in competition.

Conversely, the final rule's prohibition on new leveraged/inverse funds with market exposure above 200% of the return, or inverse return, of the relevant index may lead to reduced competition among those funds, to the extent that the provision reduces the number of such funds over time.⁹⁵⁹ As a result, fees for leveraged/inverse ETFs with exposures above this limit may rise.⁹⁶⁰

3. Capital Formation

Certain aspects of the final rules may have an impact on capital formation.⁹⁶¹ Certain of these effects may arise from a change in some investors' propensity to invest in funds, depending on their preferences for taking risk. For example, some investors may be more inclined to invest in funds as a result of increased investor protection arising from any decrease in leverage-related risks; or they may reduce their investments in certain funds that may increase their use of

⁹⁵⁹ In the period following the onset of the COVID-19 health crisis, certain leveraged/inverse ETFs changed their investment objectives and strategies. *See supra* footnote 24. As a result, the number of leveraged/inverse ETFs with exposures exceeding 200% was reduced, which is reflected in our baseline statistics in section III.B.5.

⁹⁶⁰ Leveraged/inverse funds with exposures above 200% are currently only offered in the form of ETFs and by two fund sponsors. We do not expect that the final rule will reduce the number of sponsors that choose to offer leveraged/inverse ETFs with exposures above this limit; nor do we believe that the final rule represents a change from the baseline in terms of the inability of new sponsors to enter that market, as the Commission has not provided exemptive relief to new prospective sponsors of leveraged/inverse ETFs since 2009. *See supra* text following footnote 821.

⁹⁶¹ *See supra* sections III.B.1 and III.B.5 for an overview of the baseline of the fund industry.

derivatives in light of the bright-line VaR-based limit on fund leverage risk.⁹⁶² Additionally, the rule may lead investors to increase investments in leveraged/inverse funds with exposures up to 200% as a result of any increase in competition for these funds; and the rule may lead investors to reduce investments in leveraged/inverse funds that exceed this exposure as a result of any decrease in competition or reduced investor choice for those funds.⁹⁶³ While we are unable to determine whether the final rules will lead to an overall increase or decrease in fund assets, to the extent that overall assets of funds change, this may have an effect on capital formation.

Rule 18f-4 may also decrease the use of reverse repurchase agreements, similar financing transactions, or borrowings by some funds, or reduce some funds' ability to invest the borrowings obtained through reverse repurchase agreements, although the modifications from the proposal to provide funds additional flexibility to treat these investments as derivatives transaction may make any decrease less likely.⁹⁶⁴ To the extent that this restricts a fund's ability to obtain financing to invest in debt or equity securities, capital formation may be reduced.

E. Reasonable Alternatives

1. Alternative Implementations of the VaR Tests

a. Different Confidence Level or Time Horizon

Rule 18f-4 will require that a fund's VaR model use a 99% confidence level and a time horizon of 20 trading days.⁹⁶⁵ We could alternatively require a different confidence level and/or a different time horizon for the VaR test. As discussed above in section II.D.4, market participants calculating VaR most commonly use 95% or 99% confidence levels and often use time horizons of 10 or 20 days. The VaR parameters in the final rule therefore represent a confidence level and time horizon at the high end of what is commonly used.

⁹⁶² See *supra* section III.C.2.

⁹⁶³ See *supra* sections III.C.5 and III.D.2. Any net change of assets held by leveraged/inverse funds is likely to have a small effect on capital formation as only positively leveraged funds typically invest some portion of their assets into securities whereas inversely leveraged funds typically achieve their exposures using only derivatives instruments.

⁹⁶⁴ See *supra* section III.C.4.

⁹⁶⁵ See *supra* section II.D.4.

Compared to requiring a lower confidence level and a shorter time horizon, the rule's parameters result in a VaR test that is designed to measure, and therefore limit the severity of, less frequent but larger losses. However, estimates of VaR at the larger confidence level and longer time horizon required by the final rule are based on fewer observations, which reduces the accuracy of the VaR estimate compared to using a lower confidence level and a shorter time horizon. As discussed above, we believe certain time- and confidence level scaling techniques discussed by commenters are appropriate for purposes of the final rule, which can help reduce the estimation error associated with VaR calculations and produce more-stable results.⁹⁶⁶

b. Absolute VaR Test Only

To establish an outer limit for a fund's leverage risk, the final rule will generally require a fund engaging in derivatives transactions to comply with a relative VaR test; the fund could instead comply with an absolute VaR test if the fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test. As an alternative, we considered requiring all funds that will be subject to the VaR-based limit on fund leverage risk to comply with an absolute VaR test.

Use of an absolute VaR test would be less costly for some funds that will be required to comply with the relative VaR test under the final rule, including because the relative VaR test may require some funds to pay licensing costs associated with the use of a designated index.⁹⁶⁷ In addition, use of an absolute VaR test would reduce the compliance challenge for fund risk managers, who would not have to consider if a designated reference portfolio would provide an appropriate reference portfolio for purposes of the relative VaR test.

On the other hand, the absolute VaR test is a static measure of fund risk in the sense that the implied limit on a fund's VaR will not change with the VaR of its designated reference

⁹⁶⁶ See *supra* section II.D.5 (for a more detailed discussion of the effects of time- and confidence level scaling and the comments we received on the use of these techniques).

⁹⁶⁷ See *supra* section III.C.2. A fund that uses its securities portfolio as its designated reference portfolio would not incur these costs.

portfolio. The absolute VaR test is therefore less suited for measuring leverage risk and limiting the degree to which a fund can use derivatives to leverage its portfolio, as measuring leverage inherently requires comparing a fund's risk exposure to that of an unleveraged point of reference.⁹⁶⁸ An additional implication of this aspect of an absolute VaR test is that a fund may fall out of compliance with an absolute VaR test just because the market it invests in becomes more volatile, even though the degree of leverage in the fund's portfolio may not have changed.

c. Choice of Absolute or Relative VaR Tests

As another alternative, we considered allowing derivatives risk managers to choose between an absolute and a relative VaR limit, depending on their preferences and without regard to whether a designated reference portfolio would provide an appropriate reference portfolio for purposes of the relative VaR test.⁹⁶⁹ Such an alternative would offer funds more flexibility than the final rule and could reduce compliance costs for funds, to the extent that derivatives risk managers would choose the VaR test that is cheaper to implement for their particular fund. However, this alternative may result in less uniformity in the outer limit on funds' leverage risk across the industry, as individual derivatives risk managers would have the ability to choose between VaR-based tests that could provide for different limits on fund leverage risk. Funds that invest in assets with a low VaR, for example, could obtain significantly more leverage under an absolute VaR test because the VaR of the fund's designated reference portfolio would be low. In addition, the relative VaR test resembles the way that section 18 limits a fund's leverage risk.⁹⁷⁰

We therefore continue to believe that allowing any fund to rely on the absolute VaR test may be inconsistent with investors' expectations where a designated reference portfolio would provide an appropriate reference portfolio for purposes of the relative VaR test.⁹⁷¹ As a result, investors in these funds would be less protected from leverage-related risks compared to the final rule.

⁹⁶⁸ *Id.*

⁹⁶⁹ Several commenters suggested this alternative. *See supra* section II.D.2.a.

⁹⁷⁰ *See id.*

⁹⁷¹ *See id.*

d. Third-Party Validation of a Fund's VaR Model

Rule 18f-4 does not require third-party validation of a fund's chosen VaR model. As an alternative, we considered requiring that a fund obtain third-party validation of its VaR model, either at inception or in connection with any material changes to the model, to independently confirm that the model is structurally sound and adequately captures all material risks.⁹⁷² While such a requirement could help ensure funds' compliance with the rule's VaR-based limit on fund leverage risk, this incremental benefit may not justify the potentially significant additional costs to funds associated with third-party validation of the fund's VaR model.⁹⁷³

e. Expected Shortfall or Stressed VaR

The final rule establishes an outer limit for a fund's leverage risk using VaR. Alternatively, we could require funds to comply with a limit based on stressed VaR or expected shortfall. Compared to the final rule's VaR test, both methodologies focus on more extreme losses, but also are associated with quantitative challenges inherent in estimating tail risk.⁹⁷⁴ Stressed VaR, for example, can pose quantitative challenges by requiring funds to identify a stress period with a full set of risk factors for which historical data is available. Expected shortfall, for example, generally is more sensitive to extreme outlier losses than VaR calculations because expected shortfall is based on an average of a small number of observations that are in the tail. This heightened sensitivity could be disruptive to a fund's portfolio management in the context of the final rule because it could result in large changes in a fund's expected shortfall as outlier losses enter and exit the observations that are in the tail or that are used to model the tail's distribution.

A limit on fund leverage risk based on stressed VaR or expected shortfall also would likely be less effective at limiting fund leverage risk during normal conditions and protecting

⁹⁷² We did not receive any comments on the discussion of this alternative in the Proposing Release. See Proposing Release, *supra* footnote 1, at section III.E.1.e.

⁹⁷³ We note that the UCITS regime requires third-party validation of funds' VaR models; as a result, these additional costs could be mitigated for fund that are part of a complex that also includes UCITS funds. See Proposing Release, *supra* footnote 1, at n. 243.

⁹⁷⁴ See *supra* section II.D.1.

investors from losses resulting from less extreme scenarios. Conversely, the final rule's outside limit on fund leverage risk using VaR is complemented by elements in the final rule's derivatives risk management program, such as the stress testing requirement, designed to address VaR's limitations, including that VaR does not capture tail risk. Finally, as VaR is commonly used, we do not believe that stressed VaR or expected shortfall would be cheaper to implement for funds than the final rule's VaR-based tests.

f. Funds Limited to Certain Investors

The final rule does not provide an exemption from the rule's VaR-based limit for funds that limit their investors to "qualified clients," as defined in rule 205-3 under the Advisers Act, and/or are sold exclusively to "qualified clients," "accredited investors," or "qualified purchasers."⁹⁷⁵ Some commenters suggested that the Commission exempt these funds from the rule's VaR limits⁹⁷⁶

We believe that the benefits and costs to investors and funds of the final rule's VaR-based limit on fund leverage risk, as discussed in this economic analysis, generally apply similarly across the various types of funds that will be subject to the final rule.⁹⁷⁷ However, the investor protection benefits may be attenuated for some more sophisticated investors, to the extent that these investors would prefer to invest in fund strategies that will not be possible under the final rule's VaR limits and that they fully understand the potential for losses in such funds.⁹⁷⁸ As discussed above, however, to the extent that a fund limits its investor base as described by these commenters is able to qualify for the exclusions from the investment company definition in section 3(c)(1) or 3(c)(7), the fund can operate as a private fund under those exclusions and will not be subject to section 18. Where a fund does operate as registered investment company or

⁹⁷⁵ See *supra* footnote 415.

⁹⁷⁶ See *supra* footnote 416.

⁹⁷⁷ See *supra* section III.C.2.

⁹⁷⁸ Investors that meet certain asset holdings and income requirements and thus are presumed sophisticated have the ability to invest in unregistered funds that pursue complex derivatives strategies with significant leverage, and these funds are not subject to the requirements of rule 18f-4.

BDC, however, we do not believe that the potentially attenuated benefits to some more sophisticated investors would justify the final rule exempting funds that limit their investor base from the final rule's VaR-based limit on fund leverage risk.

g. No Modification of VaR Limits for Certain Closed-End Funds

The final rule provides higher VaR limits for closed-end funds that have then-outstanding shares of preferred stock issued to investors, compared to open-end funds. Specifically, the relative VaR limit for these closed-end funds is increased from 200% to 250% of the VaR of the fund's designated reference portfolio and the absolute VaR limit is increased from 20% to 25% of the fund's assets. As an alternative, we considered requiring all funds that are subject to the relative or absolute VaR test to adhere to the same limits of 200% of the VaR of the fund's designated reference portfolio or 20% of the fund's assets, respectively.

As suggested by commenters, providing the same relative and absolute VaR limit for open-end funds and closed-end funds does not incorporate the fact that closed-end funds that have preferred stock outstanding may have a higher starting VaR than open-end funds. That is, even before entering into any derivatives transactions, such closed-end fund's VaR could be higher than an open-end fund's VaR attributable to the structural leverage obtained through the issuance of preferred stock, which section 18 of the Investment Company Act permits closed-end funds but not open-end funds to issue.⁹⁷⁹ As a result, investors may expect closed-end funds to have a higher VaR level. In addition, some closed-end funds could potentially have no or limited flexibility to enter into derivatives transactions if we required them comply with the same VaR limits as open-end funds, which could limit investor choice and impose costs on such funds.

2. Alternatives to the VaR Tests

a. Stress Testing

As an alternative to the final rule's VaR-based limit on fund leverage risk, we considered establishing an outside limit on fund leverage risk using a stress testing approach. We understand

⁹⁷⁹ See *supra* sections II.D.2.c.ii and II.D.3.

that many funds that use derivatives transactions already conduct stress testing for purposes of risk management, and the final rule likewise provides that funds required to establish a derivatives risk management program must conduct stress testing.⁹⁸⁰ However, we do not believe that a stress testing approach would impose significantly lower costs on funds compared to a VaR-based approach, with the exception of those funds that already conduct stress testing but not VaR testing.⁹⁸¹

It would be challenging for the Commission to specify a set of asset class shocks, their corresponding shock levels, and, in the case of multi-factor stress testing, assumptions about the correlations of the shocks, in a manner that applies to all funds and does not become stale over time. While we could also prescribe a principles-based stress testing requirement, we believe that the flexibility such an approach would give to individual funds over how to implement the test would render it less effective than the final rule's VaR test at establishing an outer limit on fund leverage risk.

Finally, stress testing generally focuses on a narrower and more remote range of extreme loss events compared to VaR analysis. As a result, a limit on fund leverage risk based on stress testing would likely be less effective at limiting fund leverage risk during normal conditions and protecting investors from losses resulting from less extreme scenarios.

b. Asset Segregation

As another alternative, we considered an asset segregation approach in lieu of the final rule's VaR-based limit on fund leverage risk. For example, we considered an approach similar to the Commission's position in Release 10666, under which a fund engaging in derivatives transactions would segregate cash and cash equivalents equal in value to the full amount of the conditional and unconditional obligations incurred by the fund (also referred to as "notional

⁹⁸⁰ See also Proposing Release, *supra* footnote 1, at section II.D.6.a.

⁹⁸¹ See also 2019 ICI Comment Letter (stating that, "depending on the type of fund managed and whether the fund currently employs the test for risk management purposes, some respondents viewed a stress loss test as being more burdensome to implement, while others viewed a VaR test as being more burdensome to implement.").

amount segregation”).⁹⁸² Such an approach could also permit a fund to segregate a broader range of assets, subject to haircuts.⁹⁸³ Alternatively, we could require funds to segregate liquid assets in an amount equal to the fund’s daily mark-to-market liability plus a “cushion amount” designed to address potential future losses.

We believe that asset segregation approaches have several drawbacks as a means for limiting fund leverage risk, compared to the final rule’s VaR tests.⁹⁸⁴ For example, notional amount segregation is not risk-sensitive and could restrict derivatives transactions that would reduce portfolio risk. Similarly, segregation of liquid assets in an amount equal to the fund’s daily mark-to-market liability plus a “cushion amount” would be difficult to implement in a manner that is applied uniformly across all funds and types of derivatives. In addition, asset segregation approaches raise certain compliance complexities that may not make them significantly less costly to implement for funds than the VaR tests.⁹⁸⁵

In conjunction with the final rule’s VaR-based limit, we also considered requiring a fund that relies on the final rule to maintain an amount of “qualifying coverage assets” designed to enable a fund to meet its derivatives-related obligations. However, we believe that the final rule’s requirements, including the requirements that funds establish derivatives risk management programs and comply with the rule’s VaR-based limit on fund leverage risk, will address the risk that a fund may be required to realize trading losses by selling its investments to generate cash to pay derivatives counterparties.⁹⁸⁶

⁹⁸² See also Direxion Comment Letter (suggesting that the Commission “codify existing asset segregation practices”)

⁹⁸³ The 2016 DERA Memo, for example, analyzed different risk-based “haircuts” that could apply to a broader range of assets. See, e.g., 2016 DERA Memo, *supra* footnote 5.

⁹⁸⁴ As discussed above, as a result of current asset segregation practices, funds’ derivatives use—and thus funds’ potential leverage through derivatives transactions—does not appear to be subject to a practical limit as the Commission contemplated in Release 10666. See *supra* section I.B.3. Funds’ current asset segregation practices also may not assure the availability of adequate assets to meet funds’ derivatives obligations. *Id.* Several commenters stated that an asset segregation regime may not be an effective means of addressing undue speculation concerns. See *supra* footnote 308 and accompanying text.

⁹⁸⁵ See Proposing Release, *supra* footnote 1, at section II.D.6.b.

⁹⁸⁶ See *supra* footnote 305 and accompanying text.

Some commenters suggested that we adopt narrower asset segregation approaches with regard to only certain kinds of transactions. For example, some commenters suggested that we adopt an asset segregation approach for firm and standby commitment agreements that do not satisfy the conditions in the delayed-settlement securities provision.⁹⁸⁷ However, these transactions involve many of the same kinds of risks as other derivatives instruments that are considered derivatives transactions under the rule and will therefore be included in the final rule’s definition of “derivatives transactions”. Some commenters also suggested that we adopt an asset segregation approach for reverse repurchase agreements.⁹⁸⁸ These transactions can be used to introduce leverage into a fund’s portfolio just like other forms of borrowings, or derivatives.⁹⁸⁹ Accordingly, the final rule permits a fund either to limit its reverse repurchase and other similar financing transaction activity to the applicable asset coverage limit of the Act for senior securities representing indebtedness, or, instead, to treat them as derivative transactions. Compared to these alternatives, we believe that the final rule will protect investors more effectively, because it provides a consistent set of requirements for funds engaging in economically similar transactions.

c. Exposure-Based Test

We alternatively considered an exposure-based approach for limiting fund leverage risk in lieu of the final rule’s VaR test, as one commenter suggested.⁹⁹⁰ An exposure-based test could limit a fund’s derivatives exposure, as defined in the rule, to a specified percentage of the fund’s net assets. For example, we considered requiring that a fund limit its derivatives exposure to 50% of net assets, to match the amount an open-end could borrow from a bank, or 100% of net assets to match a level of gross market exposure that generally would satisfy the relative VaR test. A similar approach would be to provide that the sum of a fund’s derivatives exposure and the value

⁹⁸⁷ See *supra* footnote 112 and accompanying text for a discussion of commenter’s suggestions related to this alternative.

⁹⁸⁸ See *supra* footnotes 722-725 and accompanying text.

⁹⁸⁹ See *supra* section III.C.4.

⁹⁹⁰ See *supra* footnotes 303-304 and accompanying text for a discussion of comments we received on using an exposure-based approach to limiting fund leverage risk.

of its other investments cannot exceed 150% or 200% of its net asset value. This latter approach, and particularly if cash and cash equivalents were not included in the calculation, would allow a fund to achieve the level of market exposure permitted for an open-end fund under section 18 using any combination of derivatives and other investments, or likewise to achieve a level of gross market exposure that generally would satisfy the relative VaR test.

While an exposure-based test may be simpler and therefore less costly to implement for the typical fund than the VaR tests, an exposure-based test has certain limitations compared to VaR tests. One limitation is that measuring derivatives exposure based on notional amounts would not reflect how derivatives are used in a portfolio, whether to hedge or gain leverage, nor would it differentiate derivatives with different risk profiles. Various adjustments to the notional amount are available that may better reflect the risk associated with the derivatives transactions, although even with these adjustments the measure would remain relatively blunt. For example, an exposure-based limit could significantly limit certain strategies that rely on derivatives more extensively but that do not seek to take on significant leverage risk.

Some of the limitations of an exposure-based approach could be addressed if rule 18f-4 were to provide an exposure-based test as an optional alternative to the VaR tests, rather than as the sole means of limiting fund leverage risk. Under this second alternative, funds with less complex portfolios might choose to rely on an exposure-based test if this would lead to lower compliance costs than the VaR tests. If we provided that the sum of a fund's derivatives exposure and the value of its other investments cannot exceed 200% of its net asset value, funds below this threshold would generally also pass the relative VaR test. Conversely, funds with more complex portfolios that rely on derivatives more extensively but that do not seek to take on significant leverage risk might choose to rely on the VaR test. As the final rule will already except limited derivatives users from the VaR-based limit on fund leverage risk, however, we do not believe that also giving funds the option of relying on an exposure-based limit on fund leverage risk would be necessary or that it would significantly reduce the compliance burden associated with the final rule.

3. Stress Testing Frequency

Rule 18f-4 will require funds that enter into derivatives transactions and are not limited derivatives users to adopt and implement a derivatives risk management program that includes stress testing, among other elements. The final rule will permit a fund to determine the frequency of stress tests, provided that the fund must conduct stress testing at least weekly.⁹⁹¹

As an alternative to the weekly requirement, we considered both shorter and longer minimum stress testing frequencies.⁹⁹² On the one hand, more frequent stress testing would reflect changes in risk for fund strategies that involve frequent and significant portfolio turnover as well as increases in market stress in a timelier manner compared to less frequent stress testing. On the other hand, given the forward-looking nature of stress testing, we expect that most funds would take foreseeable changes in market conditions and portfolio composition into account when conducting stress testing. More-frequent stress testing also may impose an increased cost burden on funds, compared to less frequent stress testing, although we would expect any additional cost burden to be small, to the extent that funds perform stress testing in an automated manner. Overall, we believe that the final rule's requirement for stress testing at least weekly appropriately balances the anticipated benefits of relatively frequent stress testing against the burdens of administering stress testing. In addition, some commenters said that a weekly stress-testing frequency is consistent with many fund's current practices.⁹⁹³

Another alternative would be to permit a fund to determine its own stress testing frequency without the final rule prescribing a minimum stress testing frequency. This approach would provide maximum flexibility to funds regarding the frequency of their stress tests, and would reduce compliance costs for funds that determine that stress testing less frequently than weekly is warranted in light of their own particular facts and circumstances. However, allowing

⁹⁹¹ See *supra* section II.B.2.c for a discussion of comments we received on this aspect of the proposal.

⁹⁹² See *supra* section II.B.2.c for a discussion of the comment letters that addressed this aspect of the proposal.

⁹⁹³ See J.P. Morgan Comment Letter; Better Markets Comment Letter.

funds individually to determine the frequency with which stress tests are conducted could result in some funds stress testing their portfolios too infrequently to provide timely information to the fund's derivatives risk manager and board. Taking these considerations into account, we are requiring weekly stress tests, rather than less-frequent testing, to provide for consistent and reasonably frequent stress testing by all funds that will be required to establish a derivatives risk management program.

4. Enhanced Disclosure

As an alternative to the requirements in rule 18f-4, such as the derivatives risk management program and the VaR-based limit on fund leverage risk, we could consider addressing the risks associated with funds' use of derivatives through enhanced disclosures to investors with respect to a fund's use of derivatives and the resulting derivatives-related risks.⁹⁹⁴ While an approach focused on enhanced disclosures could result in greater fund investment flexibility, we believe that such an approach would be less effective than the final rule in addressing the purposes and concerns underlying section 18 of the Investment Company Act. Section 18 itself imposes a specific limit on the amount of senior securities that a fund may issue, regardless of the level of risk introduced or the disclosure that a fund provides regarding those risks. Absent additional requirements to limit leverage or potential leverage, requiring enhancement to derivatives disclosure alone would not appear to provide any limit on the amount of leverage or leverage risk a fund may obtain. Indeed, the degree to which funds use derivatives varies widely between funds. As a result, an approach focused solely on enhanced disclosure requirements may not provide a sufficient basis for an exemption from the requirements of section 18 of the Investment Company Act.

⁹⁹⁴ See, e.g., Comment Letter of the Fixed Income Market Structure Advisory Committee on proposed rule 6c-11 under the Investment Company Act (Oct. 29, 2018) (recommending that the Commission consider future rulemaking regarding "leveraged ETP" investor disclosure requirements).

5. Alternative Treatment for Leveraged/Inverse Funds

Under the final rule, leveraged/inverse funds generally will be subject to the requirements of rule 18f-4 on the same basis as other funds that are subject to that rule, including the VaR-based leverage risk limit. The rule will, however, permit currently operating leveraged/inverse funds that seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index that cannot satisfy the VaR-based leverage limit to continue operating at their current leverage levels, provided they meet certain requirements.⁹⁹⁵ As an alternative, we could omit the requirement for leveraged/inverse funds to comply with the VaR-based leverage limit and instead limit these funds to, for example, obtaining 300% of the performance or inverse performance of the relevant index and adopt the proposed sales practices rules, which would have required a broker-dealer or investment adviser to exercise due diligence in approving a retail investor's account to invest in leveraged/inverse investment vehicles.⁹⁹⁶

All existing leveraged/inverse funds will be able to continue operating under the final rule; this also would be the case under the alternative. However, the final rule and the alternative have different implications for the ability of fund sponsors to offer new leveraged/inverse funds. While fund sponsors will be able to launch new funds with exposures up to 200% under the final rule, as they would under the alternative, the final rule will prevent fund sponsors from offering new funds with market exposure exceeding 200% that cannot satisfy the final rule's relative VaR test.

⁹⁹⁵ This exception is limited to funds currently in operation, and would therefore not allow a fund sponsor to launch a new leveraged/inverse fund that exceeds this exposure limit.

⁹⁹⁶ As defined in the proposed sales practices rules, leveraged/inverse investment vehicles include leveraged/inverse funds and certain exchange-listed commodity- or currency-based trusts or funds that use a similar leveraged/inverse strategy. (See Proposing Release, *supra* footnote 1, at section II.G.2.) The provision of rule 18f-4 that provides an exception from the VaR-based limit on fund leverage risk for certain leveraged/inverse funds currently in operation with leverage or inverse multiples exceeding 200% is only available to such a fund if it does not increase the level of leveraged or inverse market exposure that it seeks, directly or indirectly, to provide. This provision effectively limits these funds from operating with a leverage or inverse multiple exceeding 300%, as the Commission proposed for leveraged/inverse funds generally. The alternative considered in this section also includes such a requirement and therefore does not differ from the final rule in this respect. The Proposing Release discussed the effects of alternative exposure limits for leveraged/inverse funds. (See Proposing Release, *supra* footnote 1, at section III.E.4.)

As we discussed in the Proposing Release, broker-dealers and investment advisers would incur direct compliance costs associated with implementing due diligence and account approval requirements under the alternative.⁹⁹⁷ Commenters also expressed concerns regarding potential legal liability for broker-dealers and investment advisers associated with implementing the requirements under the proposed sales practices rules.⁹⁹⁸

The alternative also would impose a burden on investors to access leveraged/inverse investment vehicles, including on those investors that understand the risks of these products. Some leveraged/inverse investment vehicles may lose existing or potential investors as a result of some retail investors not being approved by their broker-dealer or investment adviser to transact in leveraged/inverse investment vehicles.⁹⁹⁹ This could lead to fewer leveraged/inverse investment vehicles being available to investors who would be approved to transact in these vehicles and decreased competition among these products.¹⁰⁰⁰ However, the final rule may also lead to a reduction in investor choice and competition for some leveraged/inverse investment vehicles. Specifically, because the rule limits the exception from the final rule's VaR-based limit on fund leverage risk to certain leveraged/inverse funds currently in operation, the number of leveraged/inverse funds exceeding this limit may fall under the final rule.¹⁰⁰¹

The alternative may have increased benefits for investor protection, to the extent that account approval requirements that are specific to leveraged/inverse investment vehicles, which are in addition to advisers' and broker-dealers' existing requirements and practices, are effective at helping ensure that investors in these products are limited to those who are capable of evaluating their risks.¹⁰⁰² The proposed sales practices rules would not have covered all products

⁹⁹⁷ See Proposing Release, *supra* footnote 1, at section III.C.5.

⁹⁹⁸ See *supra* footnote 582.

⁹⁹⁹ See, e.g., Americans for Limited Government Comment Letter; Direxion Comment Letter; ProShares Comment Letter; Schwab Comment Letter.

¹⁰⁰⁰ See also Flannery Comment Letter, *supra* footnote 901 (stating that the proposed sales practices rules could lead to reduced demand for leveraged/inverse funds and make offering them economically unviable); and Proposing Release, *supra* footnote 1, at section III.D.2.

¹⁰⁰¹ See *supra* sections III.C.5 and III.D.2.

¹⁰⁰² Neither Regulation Best Interest nor investment advisers' fiduciary obligations apply to

that offer leveraged or inverse exposures to an index, however, and some of those substitute products may present additional risks. For example, as one commenter stated, some investors could choose to invest in ETNs, which would not have been covered by the proposed sales practices rules and which are subject to issuer default, potentially hampering the effectiveness of the alternative to improve investor protection.¹⁰⁰³

As another alternative, we considered placing additional disclosure-based requirements on intermediaries offering leveraged/inverse investment vehicles to retail investors, as suggested by some commenters.¹⁰⁰⁴ For example, some commenters suggested we require broker-dealers to: (1) provide their self-directed customers with short, plain-English disclosures of the potential risks of trading leveraged/inverse investment vehicles, both at the point of sale and periodically thereafter; and (2) require such customers to provide an acknowledgement of receipt of these disclosures.¹⁰⁰⁵ Similar to the proposed sales practices rules, this alternative could have investor protection benefits, to the extent that these disclosures would be effective at helping ensure that investors in these products are limited to those who are capable of evaluating their risks. At the same time, this alternative would also impose costs on the intermediaries that would be required to implement the requirement and would impose a burden on investors to access leveraged/inverse investment vehicles, including on those investors that understand the risks of these products.

As another alternative, we considered requiring all leveraged/inverse funds to comply with the final rule's VaR-based leverage limit. Compared to the final rule, this alternative would therefore not permit any currently operating leveraged/inverse funds that seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index that cannot satisfy the VaR-based leverage limit to continue operating at their current leverage levels. This alternative would protect investors who may not be capable of

investments in leveraged/inverse investment vehicles by self-directed retail investors.

¹⁰⁰³ See Flannery Comment Letter, *supra* footnote 901.

¹⁰⁰⁴ See, e.g., Direxion Comment Letter; Schwab Comment Letter.

¹⁰⁰⁵ See, e.g., Schwab Comment Letter; TD Ameritrade Comment Letter.

evaluating the risks associated with leveraged/inverse funds that cannot satisfy the rule's VaR based leverage limit. At the same time, this alternative would restrict investor choice for investors who are capable of evaluating the risks associated with these funds and would impose a cost on these funds by requiring them to either stop operating or change their investment objectives.

In light of these considerations and the staff review of the effectiveness of the existing regulatory requirements in protecting investors in leveraged/inverse and other complex investment products, we are not adopting the proposed sales practices rules or any of the other alternatives discussed in this section at this time.

IV. PAPERWORK REDUCTION ACT ANALYSIS

A. Introduction

Rule 18f-4 will result in new “collection of information” requirements within the meaning of the Paperwork Reduction Act of 1995 (“PRA”).¹⁰⁰⁶ In addition, the amendments to rules 6c-11 and 30b1-10 under the Investment Company Act, as well as to Forms N-PORT, Form N-LIQUID (which will be re-titled Form N-RN), and N-CEN will affect the collection of information burden under those rules and forms.¹⁰⁰⁷

The titles for the existing collections of information are: “Form N-PORT” (OMB Control No. 3235-0731); “Rule 30b1-10 and Form N-LIQUID” (OMB Control No. 3235-0754); “Form N-CEN” (OMB Control No. 3235-0730); and “Rule 6c-11 under the Investment Company Act of

¹⁰⁰⁶ 44 U.S.C. 3501-3520.

¹⁰⁰⁷ We do not believe that the final conforming amendment to Form N-2, to reflect a clarification that funds do not have to disclose in their senior securities table the derivatives transactions and unfunded commitment agreements entered into in reliance on rule 18f-4, makes any new substantive recordkeeping or information collection within the meaning of the PRA. The Commission stated this view in the Proposing Release and did not receive any comments regarding any burden and cost estimates to Form N 2. Accordingly, we do not revise any burden and cost estimates in connection with this amendment.

Similarly, we do not believe that the final conforming amendments to rule 22e-4 and Form N-PORT, to remove references to assets “segregated to cover” derivatives transactions in the rule and form and to amend the Form N-PORT general instructions to clarify the term “derivatives transaction” in light of the adoption of rule 18f-4, result in any new substantive recordkeeping or information collection within the meaning of the PRA. Accordingly, we do not revise any burden and cost estimates in connection with these amendments.

1940, Exchange-traded funds” (OMB Control No. 3235-0764). The title for the new collection of information will be: “Rule 18f-4 under the Investment Company Act of 1940, Use of Derivatives by Registered Investment Companies and Business Development Companies.” The Commission is submitting these collections of information to the Office of Management and Budget (“OMB”) for review in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently-valid control number.

B. Rule 18f-4

Rule 18f-4 permits a fund to enter into derivatives transactions, notwithstanding the prohibitions and restrictions on the issuance of senior securities under section 18 of the Investment Company Act.

A fund that relies on rule 18f-4 to enter into derivatives transactions generally will be required to: adopt a derivatives risk management program; have its board of directors approve the fund’s designation of a derivatives risk manager and receive direct reports from the derivatives risk manager about the derivatives risk management program; and comply with a VaR-based test designed to limit a fund’s leverage risk consistent with the investor protection purposes underlying section 18. Rule 18f-4 includes an exception from the derivatives risk management program requirement and limit on fund leverage risk if a fund limits its derivatives exposure to 10% of its net assets (the fund may exclude from this calculation derivatives transactions that it uses to hedge certain currency and interest rate risks). A fund relying on this exception will be required to adopt policies and procedures that are reasonably designed to manage its derivatives risks.

Rule 18f-4 also includes an exception from the VaR-based limit on leverage risk for a leveraged/inverse fund that cannot comply with rule 18f-4’s limit on fund leverage risk and that, as of October 28, 2020, is: (1) in operation, (2) has outstanding shares issued in one or more public offerings to investors, and (3) discloses in its prospectus that it has a leverage multiple or inverse multiple that exceeds 200% of the performance or the inverse of the performance of the

underlying index. A fund relying on this exception must disclose in its prospectus that it is not subject to rule 18f-4's limit on fund leverage risk.¹⁰⁰⁸ Rule 18f-4 also requires a fund to meet certain recordkeeping requirements that are designed to provide the Commission, and the fund's board of directors and compliance personnel, the ability to evaluate the fund's compliance with the rule's requirements. Finally, rule 18f-4 includes provisions that will permit funds to enter into reverse repurchase agreements (and similar financing transactions) and "unfunded commitments" to make certain loans or investments, and to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, subject to conditions tailored to these transactions.

The purpose of rule 18f-4 is to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives and the other transactions addressed in the rule. The respondents to rule 18f-4 will be registered open- and closed-end management investment companies and BDCs.¹⁰⁰⁹ We estimate that 5,203 funds will likely rely on rule 18f-4.¹⁰¹⁰ Compliance with rule 18f-4 will be mandatory for all funds that seek to engage, in reliance on the rule, in derivatives transactions and certain other transactions that the rule addresses, which

¹⁰⁰⁸ See rule 18f-4(c)(5)(iii); *supra* section II.F.2.

¹⁰⁰⁹ See rule 18f-4(a) (defining "fund").

¹⁰¹⁰ We estimate this number as follows: 2,766 funds that will be subject to the derivatives risk management program requirement + 2,437 funds relying on the limited derivatives user exception and complying with the related limited derivatives user requirements = 5,203 funds. See *supra* text accompanying footnote 849 (estimated number of funds subject to the derivatives risk management program requirement), and *supra* paragraph following footnote 892 (estimated number of funds that will qualify as limited derivatives users).

The Commission's estimates of the relevant wage rates for internal time costs in the tables below are based on salary information for the securities industry compiled by the Securities Industry and Financial Markets Association's Office Salaries in the Securities Industry 2013. The estimated wage figures are modified by Commission staff to account for an 1,800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits, overhead, and adjusted to account for the effects of inflation. See Securities Industry and Financial Markets Association, Report on Management & Professional Earnings in the Securities Industry 2013 ("SIFMA Report"). These wage figures differ slightly from the same figures the Commission used in its estimates in the Proposing Release to account for incremental inflation effects. The Commission's estimates of the relevant wage rates for external time costs, such as outside legal services, takes into account staff experience, a variety of sources including general information websites, and adjustments for inflation.

would otherwise be subject to the restrictions of section 18. To the extent that records required to be created and maintained by funds under the rule are provided to the Commission in connection with examinations or investigations, such information will be kept confidential subject to the provisions of applicable law.

1. Derivatives Risk Management Program

Rule 18f-4 requires certain funds relying on the rule to adopt and implement a written derivatives risk management program, which includes policies and procedures reasonably designed to manage the fund's derivatives risks and a periodic review requirement.¹⁰¹¹ We estimate that 2,766 funds will be subject to the program requirement.¹⁰¹²

Table 1 below summarizes the initial and ongoing annual burden estimates associated with the derivatives risk management program requirement under rule 18f-4 as adopted. While the Commission did not receive any comments specifically addressing the estimated PRA burdens in the Proposing Release associated with the derivatives risk management program, it did receive comments suggesting that the implementation of the program, including the associated collections of information as defined in the PRA, may be more burdensome than the Commission estimated at proposal.¹⁰¹³ As such, we have increased the annual burden estimates associated with the derivatives risk management program, as shown in Table 1 below.

¹⁰¹¹ See rule 18f-4(c)(1); *supra* section II.B (discussing the derivatives risk management program requirements).

¹⁰¹² See *supra* sentence following footnote 882. A fund that is a limited derivatives user will not be required to comply with the program requirement. Funds that are limited derivatives users will be required to adopt policies and procedures that are reasonably designed to manage their derivatives risks. See rule 18f-4(c)(4); *infra* section IV.B.6 (discussing collections of information related to limited derivatives users).

¹⁰¹³ See *supra* section II.B.

Table 1: Derivatives Risk Management Program PRA Estimates

	Internal initial burden hours	Internal annual burden hours ¹		Wage rate ²	Internal time costs	Annual external cost burden
PROPOSED ESTIMATES						
Written derivatives risk management program development	12 hours	4 hours	×	\$357 (derivatives risk manager)	\$1,428	\$0
	12 hours	4 hours	×	\$466 (assistant general counsel)	\$1,864	
	12 hours	4 hours	×	\$365 (compliance attorney)	\$1,460	
Periodic review and revisions of the program	0 hours	2 hours	×	\$357 (derivatives risk manager)	\$714	\$0
	0 hours	2 hours	×	\$466 (assistant general counsel)	\$932	
	0 hours	2 hours	×	\$365 (compliance attorney)	\$730	
Total annual burden per fund		18 hours			\$7,128	\$0
Number of funds		× 2,693			× 2,693	× 2,693
Total annual burden		48,474 hours			\$19,195,704	\$0
FINAL ESTIMATES						
Written derivatives risk management program development	45 hours	15 hours	×	\$360 (derivatives risk manager)	\$5,400	\$4,890 ³
	45 hours	15 hours	×	\$470 (assistant general counsel)	\$7,050	
	45 hours	15 hours	×	\$368 (compliance attorney)	\$5,520	
Periodic review and revisions of the program	0 hours	8 hours	×	\$360 (derivatives risk manager)	\$2,880	\$2,934 ⁴
	0 hours	8 hours	×	\$470 (assistant general counsel)	\$3,760	
	0 hours	8 hours	×	\$368 (compliance attorney)	\$2,944	
Total annual burden per fund		69 hours			\$27,554	\$7,824
Number of funds		× 2,766			× 2,766	× 1,383 ⁵
Total annual burden		190,854			\$76,214,364	\$10,820,592

Notes:

1. For “Written Derivatives Risk Management Program Development,” these estimates include initial burden estimates annualized over a three-year period.
2. *See supra* footnote 1010.
3. This estimated burden is based on the estimated wage rate of \$489/hour, for 10 hours, for outside legal services. *See supra* footnote 1010 (regarding wage rates with respect to external cost estimates).
4. This estimated burden is based on the estimated wage rate of \$489/hour, for 6 hours, for outside legal services. *See supra* footnote 1010 (regarding wage rates with respect to external cost estimates).
5. We estimate that 50% of funds will use outside legal services for these collections of information. This estimate takes into account that funds may elect to use outside legal services (along with in-house counsel) in connection with these requirements of rule 18f-4, based on factors such as fund budget and the fund’s standard practices for using outside legal services, as well as personnel availability and expertise.

2. Board Oversight and Reporting

Rule 18f-4 requires: (1) a fund's board of directors to approve the designation of the fund's derivatives risk manager, (2) the derivatives risk manager to provide certain written reports to the board.¹⁰¹⁴ We estimate that 2,766 funds will be subject to these requirements.¹⁰¹⁵

Table 2 below summarizes the initial and ongoing annual burden estimates associated with the board oversight and reporting requirements under rule 18f-4. While the Commission did not receive any comments specifically addressing the estimated PRA burdens in the Proposing Release associated with the board oversight and reporting requirements, it did receive comments suggesting that requiring the fund's board of directors to approve the designation of the fund's derivatives risk manager would place increased burdens on the fund's board of directors.¹⁰¹⁶ Accordingly, we have adjusted the proposal's estimated annual burden hours and total time costs to account for the potential for increased time burdens on the board of directors and to reflect the Commission's updated views on typical time burdens associated with similar board reporting requirements in other Commission regulations.

¹⁰¹⁴ See rule 18f-4(c)(3)(i) through (iii); *supra* section II.C. Burdens associated with reports to the fund's board of directors of material risks arising from the fund's derivatives transactions, as described in rule 18f-4(c)(1)(v), are discussed above in *supra* section IV.B.1.

¹⁰¹⁵ See *supra* footnotes 849, 1010 and accompanying text.

¹⁰¹⁶ See Dechert Comment Letter I; IDC Comment Letter; see also *supra* section II.C.1.

Table 2: Board Oversight and Reporting PRA Estimates

	Internal initial burden hours	Internal annual burden hours ¹		Wage rate ²	Internal time costs	Annual external cost burden
PROPOSED ESTIMATES						
Approving the designation of the derivatives risk manager	3 hours	1 hour	×	\$17,860 (combined rate for 4 directors)	\$17,860	
Derivatives risk manager written reports ³		8 hours	×	\$357 (derivatives risk manager)	\$2,856	
		1 hour	×	\$17,860 (combined rate for 4 directors)	\$17,860	
Total annual burden per fund		10 hours			\$38,576³	
Number of funds		× 2,693			× 2,693	
Total annual burden		26,930 hours			\$103,885,168	
FINAL ESTIMATES						
Approving the designation of the derivatives risk manager	3 hours	2 hours	×	\$4,770 (combined rate for 9 directors) ⁴	\$9,540	\$1,467 ⁵
Derivatives risk manager written reports	12 hours	18 hours	×	\$360 (derivatives risk manager)	\$6,480	\$1,956 ⁶
	1.5 hours	2 hours	×	\$4,770 (combined rate for 9 directors) ⁴	\$9,540	
	6 hours	6 hours	×	\$368 (compliance attorney)	\$2,208	
Total annual burden per fund		28 hours			\$27,768	\$3,423
Number of funds		× 2,766			× 2,766	1,383 ⁷
Total annual burden		77,448 hours			\$76,806,288	4,734,009

Notes:

1. This estimate includes initial burden estimates annualized over a three-year period, plus any estimated ongoing annual burden hours.
2. See *supra* footnote 1012 (regarding wage rates).
3. This reflects an increase to the estimate that appeared in the Proposing Release, to account for a correction to the total internal time costs calculation as it appeared in the Proposing Release.
4. This reflects a reduction of the proposed estimate, to account for: (1) inadvertent quadrupling of the estimated rate in the proposal; and (2) updated assumptions about the number of directors sitting on a fund's board.
5. This estimated burden is based on the estimated wage rate of \$489/hour, for 3 hours, for outside legal services. See *supra* footnote 1010 (regarding wage rates with respect to external cost estimates).
6. This estimated burden is based on the estimated wage rate of \$489/hour, for 4 hours, for outside legal services. See *supra* footnote 1010 (regarding wage rates with respect to external cost estimates).
7. We estimate that 50% of funds will use outside legal services to assist with these collections of information. This estimate takes into account that funds may elect to use outside legal services (along with in-house counsel) in connection with these requirements of rule 18f-4, based on factors such as fund budget and the fund's standard practices for using outside legal services, as well as personnel availability and expertise.

3. VaR Remediation

Rule 18f-4 requires that if a fund is not in compliance within five business days, following an exceedance of the VaR-based fund leverage limit, the derivatives risk manager must provide certain written reports to the fund's board.¹⁰¹⁷ In contrast, the proposed rule would have required the derivatives risk manager to notify the fund's board (and would not have specifically required a written report for such notification) following the fund being out of compliance with the VaR-based fund leverage limit for three business days.¹⁰¹⁸

Table 3 below summarizes the initial and ongoing annual burden estimates associated with the VaR-related remediation reports required under rule 18f-4. For purposes of the PRA analysis, we do not estimate that there will be any initial or ongoing external costs associated with the VaR-related remediation requirements.

¹⁰¹⁷ See rule 18f-4(c)(2)(ii)(A) through (C); *supra* section II.D.6.b.

¹⁰¹⁸ See *supra* section II.D.6.b.

Table 3: VaR Remediation PRA Estimates

	Internal initial burden hours	Internal annual burden hours	Wage rate ¹	Internal time costs
FINAL ESTIMATES				
VaR-related remediation reports		0.1 hours ² ×	\$360 (derivatives risk manager)	\$36.00
		0.1 hours ² ×	\$332 (senior portfolio manager)	\$33.20
		0.1 hours ²	\$368 (compliance attorney)	\$36.80
		0.02 hours ³ ×	\$4,770 (combined rate for 9 directors)	\$95.40
Total annual burden per fund		0.32 hours		\$201.40
Number of funds		× 2,696		× 2,696
Total annual burden		863 hours		\$542,974

Notes:

1. See *supra* footnote 1010 (regarding wage rates).

2. This estimate is based on the assumption that, of the 2,696 funds that will be required to comply with either of the VaR tests, on average 27 funds (or 1%), breach the relative or absolute VaR test annually. Each of the derivatives risk manager, a senior portfolio manager, and a compliance attorney will spend 10 hours preparing and reviewing related remediation reports. However, because we estimate that only 1% of funds will breach the relative or absolute VaR test annually, the hours burden is being decreased by 99%. 10 hours × 1% = 0.1 hours.

3. This estimate is based on the assumption that, of the 2,696 funds that will be required to comply with either of the VaR tests, on average 27 funds (or 1%), breach the relative or absolute VaR test annually. The board will spend 2 hours reviewing related remediation reports. However, because we estimate that only 1% of funds will breach the relative or absolute VaR test annually, the hours burden is being decreased by 99%. 2 hours × 1% = 0.02 hours.

4. Disclosure Requirement for Certain Leveraged/Inverse Funds

Under the final rule, an over-200% leveraged/inverse fund currently in operation will not have to comply with the VaR-based leverage risk limit. Such a fund is required to disclose in its prospectus that it is not subject to rule 18f-4's limit on fund leverage risk.¹⁰¹⁹ This requirement represents a change from the proposal, in which we proposed to require that all leveraged/inverse funds (*i.e.*, not only those with a leverage or inverse multiple above 200% of the underlying index) disclose that they are not subject to the rule's VaR-based leverage risk limit. As such, whereas in the proposal the Commission estimated that 269 leveraged/inverse funds would be subject to this prospectus disclosure requirement, we now estimate that 70 over-200% leveraged/inverse funds will be subject to this requirement.¹⁰²⁰

Table 4 below summarizes the initial and ongoing annual burden estimates associated with the rule's disclosure requirement for over-200% leveraged/inverse funds. We do not estimate that there will be any initial or ongoing external costs associated with this disclosure requirement. The Commission did not receive any comments relating to the estimated PRA burdens set forth in the Proposing Release associated with the prospectus disclosure requirement for leveraged/inverse funds.¹⁰²¹ As shown in Table 4 below, we are making a modest increase to the estimated per-fund burden associated with the prospectus disclosure requirement for over-200% leveraged/inverse funds to reflect updated views on the burdens related to similar prospectus disclosure requirements.

¹⁰¹⁹ See rule 18f-4(c)(5)(iii); *supra* section II.F.

¹⁰²⁰ See *supra* paragraph accompanying footnote 819 (estimating 70 leveraged/inverse ETFs (and 0 leveraged/inverse mutual funds) that currently seek to provide leveraged or inverse market exposure exceeding 200% of the return or inverse return of the relevant index).

¹⁰²¹ See *supra* footnote 612 and accompanying text (discussing comment received on proposed prospectus disclosure requirement generally).

Table 4: Disclosure Requirement Associated with Certain Leveraged/Inverse Funds PRA Estimates

	Internal initial burden hours	Internal annual burden hours		Wage rate ¹	Internal time costs
PROPOSED ESTIMATES					
Leveraged/inverse fund prospectus disclosure	0 hours	.25 hours	×	\$309 (compliance manager)	\$77
	0 hours	.25 hours	×	\$365 (compliance attorney)	\$91
Total annual burden per fund		.5 hour²			\$168
Number of funds		× 269			× 269
Total annual burden		135 hours			\$45,192
FINAL ESTIMATES					
Leveraged/inverse fund prospectus disclosure	1.5 hours	0.5 hours ³	×	\$312 (compliance manager)	\$156
	1.5 hours	0.5 hours ³	×	\$368 (compliance attorney)	\$184
Total annual burden per fund		1 hour			\$340
Number of funds		× 70			× 70
Total annual burden		70 hours			\$23,800

Notes:

1. See *supra* footnote 1010 (regarding wage rates).
2. This reflects a reduction of the annual burden hours estimate that appeared in the Proposing Release, to account for inadvertent doubling of the estimated burden hours in the Proposing Release.
3. This estimate includes initial burden estimates annualized over a three-year period.

5. Disclosure Changes for Money Market Funds

In a change from the proposal, the final rule includes a provision that will permit money market funds to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle (“delayed-settlement securities provision”). As in the proposal, money market funds are excluded from the full scope of the final rule because they do not typically enter into derivatives transactions, as defined in the rule.¹⁰²² To the extent a money market fund currently discloses in its prospectus that it may enter into transactions covered by the final rule other than transactions covered by the delayed-settlement securities provision, money market funds will be subject to the burdens associated with making disclosure changes to their prospectuses. We estimate that 420 funds could be subject to such disclosure changes.¹⁰²³

Table 5 below summarizes the initial and ongoing annual burden estimates associated with disclosure changes that money market funds could make because of rule 18f-4. For purposes of this PRA analysis, we do not estimate that there will be any initial or ongoing external costs associated with this disclosure change requirement. The Commission did not receive any comments relating to the estimated PRA burdens set forth in the Proposing Release associated with potential disclosure changes for money market funds. However, we have adjusted the proposal’s estimated annual burden hours and total time costs to reflect the Commission’s updated views on typical time burdens associated with similar disclosure requirements in other Commission regulations.

¹⁰²² See rule 18f-4(a) (defining the term “Fund” to “...not include a registered open-end company that is regulated as a money market fund”).

¹⁰²³ See *supra* footnote 804 and accompanying text. This likely overestimates the total number of funds subject to these disclosure changes, because we believe that money market funds currently do not typically engage in derivatives transactions.

Table 5: Disclosure Changes for Money Market Funds PRA Estimates

	Internal initial burden hours	Internal annual burden hours ¹		Wage rate ²	Internal time costs
PROPOSED ESTIMATES					
Money market prospectus disclosure changes	.75 hours	.25 hours	×	\$309 (compliance manager)	\$77
	.75 hours	.25 hours	×	\$365 (compliance attorney)	\$91
Total annual burden per fund		.5 hours			\$168
Number of funds		× 413			× 413
Total annual burden		207 hours			\$69,384
FINAL ESTIMATES					
Money market prospectus disclosure changes	3 hours	1 hour	×	\$312 (compliance manager)	\$312
	3 hours	1 hour	×	\$368 (compliance attorney)	\$368
Total annual burden per fund		2 hours			\$680
Number of funds		× 420			× 420
Total annual burden		840 hours			\$285,600

Notes:

1. These estimates include initial burden estimates annualized over a three-year period.
2. See *supra* footnote 1010 (regarding wage rates).

6. Requirements for Limited Derivatives Users

Rule 18f-4 will require funds relying on the limited derivatives user provisions to adopt and implement written policies and procedures reasonably designed to manage the fund's derivatives risks.¹⁰²⁴ In addition to the initial burden to document the policies and procedures, we estimate that limited derivatives users will have an ongoing burden associated with any review and revisions to their policies and procedures to ensure that they are "reasonably designed" to manage the fund's derivatives risks. Rule 18f-4 also requires that the adviser for any limited derivatives user that exceeds the 10% derivatives exposure threshold and does not reduce its exposure within five business days, must provide a written report to the fund's board of directors informing them whether the adviser intends to reduce the exposure promptly, but within no more than 30 days of the exceedance, or put in place a derivatives risk management program and comply with the VaR-based limit on fund leverage risk as soon as reasonably practicable.¹⁰²⁵ We estimate that 2,437 funds will be subject to these limited derivatives users requirements.¹⁰²⁶

Table 6 below summarizes the initial and ongoing annual burden estimates associated with the requirements for limited derivatives users under rule 18f-4. The Commission did not receive comments relating to the estimated hour and costs burdens associated with the preparation and maintenance of a limited derivatives user's policies and procedures. However, we have increased the proposal's estimated burden hours and internal and external total time costs to account for the potential that funds may implement additional policies and procedures related to the changes we have incorporated into the final rule to address exceedances of the 10% derivatives exposure threshold. This increase also reflects the Commission's updated views on typical time burdens and costs associated with the development of fund risk management policies and procedures.

¹⁰²⁴ See rule 18f-4(c)(4); *supra* section II.E.3 (discussing the policies and procedures requirement for limited derivatives users).

¹⁰²⁵ See rule 18f-4(c)(4)(ii); *supra* section II.E.4.

¹⁰²⁶ See *supra* paragraph following footnote 892.

Some commenters did state that many funds already have policies and procedures in place to manage certain risks associated with their derivatives transactions.¹⁰²⁷ We do not have data to determine how many funds currently have written policies and procedures in place that will satisfy the rule's requirement. However, for purposes of our estimated hour and costs burden, we assume that all limited derivatives users will incur a cost associated with this requirement. Accordingly, our estimate may be over-inclusive, to the extent that it counts funds that already have in place policies and procedures reasonably designed to manage the fund's derivatives risks. Our estimate also may be under-inclusive, to the extent that it does not count funds that do not currently use derivatives, but that might want to implement policies and procedures reasonably designed to manage derivatives risks in order to have future flexibility to engage in derivatives transactions under the final's rule's limited derivatives user provision.

¹⁰²⁷ See Fidelity Comment Letter; IAA Comment Letter; *see also supra* footnote 893 and accompanying paragraph (stating that the Commission believes that “these policies and procedures could be readily adapted to meet the final rule's requirements without significant additional cost”).

Table 6: Requirements for Limited Derivatives Users PRA Estimates

	Internal initial burden hours	Internal annual burden hours ¹		Wage rate ²	Internal time costs	Annual external costs burdens
PROPOSED ESTIMATES						
Written policies and procedures	3 hours	1 hour	×	\$329 (senior portfolio manager)	\$329	\$0
	3 hours	1 hour	×	\$365 (compliance attorney)	\$365	
Review of policies and procedures	0 hours	.25 hours		\$329 (senior portfolio manager)	\$82.25	\$0
	0 hours	.25 hours		\$365 (compliance attorney)	\$91.25	
Total annual burden per fund		2.5 hours			\$867.50	
Number of funds		× 2,398			× 2,398	
Total annual burden		5,995 hours			\$2,080,265	\$0
FINAL ESTIMATES						
Written policies and procedures	18 hours	6 hours	×	\$332 (senior portfolio manager)	\$1,992	\$1,956 ⁵
	18 hours	6 hours	×	\$368 (compliance attorney)	\$2,208	
Review of policies and procedures	0 hours	3 hours		\$332 (senior portfolio manager)	\$996	\$978 ⁶
	0 hours	3 hours		\$368 (compliance attorney)	\$1,104	
Limited derivatives user-related remediation reports		0.1 hours ³	×	\$332 (senior portfolio manager)	\$33.20	\$0
		0.1 hours ³		\$368 (compliance attorney)	\$36.80	
		0.02 hours ⁴	×	\$4,770 (combined rate for 9 directors)	\$95.40	
Total annual burden per fund		18.22 hours			\$6,465.40	\$2,934
Number of funds		× 2,437			× 2,437	× 1,219 ⁷
Total annual burden		44,402 hours			\$15,756,180	\$3,576,546

Notes:

1. For "Written Policies and Procedures," these estimates include initial burden estimates annualized over a three-year period.

2. See *supra* footnote 1010 (regarding wage rates).

3. This estimate is based on the assumption that, of the 2,437 funds that will be limited derivatives user, on average 25 funds (or 1%), will be subject to the board reporting requirement in the exception's remediation provision annually. Each of the senior portfolio manager and compliance attorney will spend 10 hours preparing and reviewing the related remediation reports. However, because we estimate that only 1% of funds will be subject to the board reporting requirement in the exception's remediation provision annually, the hours burden is being decreased by 99%. 10 hours × 1% = 0.1 hours.

4. This estimate is based on the assumption that, of the 2,437 funds that will be limited derivatives user, on average 25 funds (or 1%), will be subject to the board reporting requirement in the exception's remediation provision annually. The board will spend 2 hours reviewing related remediation reports. However, because we estimate that only 1% of funds will be subject to the board reporting requirement in the exception's remediation provision annually, the hours burden is being decreased by 99%. 2 hours × 1% = 0.02 hours.

5. This estimated burden is based on the estimated wage rate of \$489/hour, for 4 hours, for outside legal services. See *supra* footnote 1010 (regarding wage rates with respect to external cost estimates).

6. This estimated burden is based on the estimated wage rate of \$489/hour, for 2 hours, for outside legal services. See *supra* footnote 1010 (regarding wage rates with respect to external cost estimates).

7. We estimate that 50% of funds will use outside legal services for these collections of information. This estimate takes into account that funds may elect to use outside

legal services (along with in-house counsel) in connection with these requirements of rule 18f-4, based on factors such as fund budget and the fund's standard practices for using outside legal services, as well as personnel availability and expertise.

7. Recordkeeping Requirements

Rule 18f-4 will require a fund that enters into derivatives transactions to maintain certain records. As proposed, if the fund is not a limited derivatives user, the fund will be required to maintain records related to the fund's derivatives risk management program and the VaR-based limit on fund leverage risk, including records related to board oversight and reporting (including records of the written reporting that the rule requires to occur between the derivatives risk manager and the fund's board when the fund is out of compliance with the applicable VaR test).¹⁰²⁸ As a modification to the proposal the final rule includes further obligations for a fund that is out of compliance with its applicable VaR test to provide written reports to the board.¹⁰²⁹ These additional reports will be covered by the final recordkeeping requirements.

If the fund is a limited derivatives user, the fund will be required to maintain a written record of its policies and procedures that are reasonably designed to manage derivatives risks.¹⁰³⁰ As a conforming change in the final rule, a limited derivatives user will also be required to maintain records of written reports provided to the board upon any exceedance by the fund of the 10% derivatives exposure threshold, in accordance with the rule.¹⁰³¹

Further, in light of the final rule providing two separate treatment options for a fund that enters into a reverse repurchase agreement or similar financing transaction, we have conformed the recordkeeping provision to require that a fund that enters into reverse repurchase agreements or similar financing transactions to maintain a written record documenting whether it is complying with the asset coverage requirements of section 18 with respect to these transactions, or alternatively whether it is treating these transactions as derivatives transactions for all purposes under rule 18f-4.

Finally, a fund engaging in unfunded commitment agreements will be required to maintain records documenting the sufficiency of its cash and cash equivalents to meet its

¹⁰²⁸ See rule 18f-4(c)(6)(i)(A) through (C).

¹⁰²⁹ See *supra* footnote 772 and accompanying text.

¹⁰³⁰ See rule 18f-4(c)(6)(i)(D).

¹⁰³¹ *Id.*

obligations with respect to each unfunded commitment agreement.¹⁰³²

We estimate that 5,203 funds will be subject to recordkeeping requirements under the final rule (although not all funds will be subject to all of the rule's recordkeeping requirements).¹⁰³³ Below we estimate the average initial and ongoing annual burdens associated with the recordkeeping requirements. This average takes into account that some funds such as limited derivatives users may have less extensive recordkeeping burdens than other funds that use derivatives, or the other transactions that final rule 18f-4 addresses, more substantially.

Table 7 below summarizes the proposed PRA estimates associated with the recordkeeping requirements in rule 18f-4. The Commission did not receive any comments related to the estimated PRA burdens set forth in the Proposing Release associated with the rule's recordkeeping requirements. However, we have adjusted the proposal's estimated annual burden hours and total time costs, on account of the conforming modifications to the proposed recordkeeping requirements that we are adopting, as well as to reflect the Commission's updated views on typical time burdens and personnel associated with similar recordkeeping requirements in other Commission regulations.

¹⁰³² See rule 18f-4(e)(2).

¹⁰³³ We estimate that the number of funds that will be subject to the recordkeeping requirements includes the number of funds that we estimate will be required to comply with the derivatives risk management program requirement (2,766 funds, which number encompasses the 2,696 funds that we estimate will be subject to the VaR test requirements) and the number of funds that we estimate will qualify as limited derivatives users (2,437 funds). See *supra* footnote 1010 and sections III.C.1- III.C.3. 2,766 funds + 2,437 funds = 5,203 funds.

Based on staff review of filings on Forms N-PORT and N-CEN for 2019, we estimate that 181 funds, or 1% of all funds subject to the final rule, will enter into reverse repurchase agreements or similar financing transactions (excluding BDCs, which we do not believe enter into such transactions to a significant degree) and will be subject to the recordkeeping requirements in the final rule. We further estimate that approximately 8.5% of open-end funds, 30% of registered closed-end funds, and 100% of BDCs, or 1,339 funds (10% of all funds subject to the rule) will enter into unfunded commitments and will incur be subject to the recordkeeping requirements in the final rule. To prevent over-counting, we are not adding these numbers of funds that engage in reverse repurchase agreements and unfunded commitment agreements to the sum of 5,203 funds discussed above, because we assume that these funds generally either would have to comply with the derivatives risk management program requirement or would qualify as limited derivatives users.

Table 7: Recordkeeping PRA Estimates

	Internal initial burden hours	Internal annual burden hours ¹		Wage rate ²	Internal time costs	Initial external cost burden	Annual external cost burden
PROPOSED ESTIMATES							
Establishing recordkeeping policies and procedures	1.5 hours	.5 hours		\$62 (general clerk)	\$31	\$1,800	\$600
	1.5 hours	.5 hours		\$95 (senior computer operator)	\$47.50		
Recordkeeping	0 hours	2 hours	×	\$62 (general clerk)	\$124	\$0	\$0
	0 hours	2 hours	×	\$95 (senior computer operator)	\$190		
Total annual burden per fund		5 hours			\$392.50		\$600
Number of funds		× 5,091			× 5,091		5,091
Total annual burden		25,455 hours			\$1,998,218³		\$3,054,600
FINAL ESTIMATES							
Establishing recordkeeping policies and procedures for derivatives risk management program and VaR requirements	9 hours	3 hours		\$63 (general clerk)	\$189	\$1,800 ⁵	\$600
	9 hours	3 hours		\$96 (senior computer operator)	\$288		
	9 hours	3 hours		\$368 (compliance attorney)	\$1,104		
Recordkeeping for derivatives risk management program and VaR requirements	0 hours	16 hours	×	\$63 (general clerk)	\$1,008	\$0	\$0
	0 hours	16 hours	×	\$96 (senior computer operator)	\$1,536		
	0 hours	16 hours		\$368 (compliance attorney)	\$5,888		
Total annual burden per fund		57 hours			\$10,013		\$600
Number of funds		× 2,766 ⁴			× 2,766 ⁴		2,766
Total annual burden		157,662 hours			\$27,695,958		\$1,659,600
Establishing recordkeeping policies and procedures for limited derivatives users	1.5 hours	.5 hours		\$63 (general clerk)	\$31.50	\$1,800	\$600
	1.5 hours	.5 hours		\$96 (senior computer operator)	\$48		
	1.5 hours	.5 hours		\$368 (compliance attorney)	\$184		
Recordkeeping for limited derivatives users	0 hours	2 hours	×	\$63 (general clerk)	\$126	\$0	\$0
	0 hours	2 hours	×	\$96 (senior computer operator)	\$192		
	0 hours	2 hours		\$368 (compliance attorney)	\$736		
Total annual burden per fund		7.5 hours			\$1,317.50		\$600
Number of funds		× 2,437			× 2,437		2,437

Total annual burden	18,278 hours		\$3,210,748	\$1,462,200
Establishing recordkeeping policies and procedures for funds engaging in unfunded commitment agreements	1.5 hours	.5 hours	\$63 (general clerk)	\$31.50
	1.5 hours	.5 hours	\$96 (senior computer operator)	\$48
	1.5 hours	.5 hours	\$368 (compliance attorney)	\$184
				\$0
				\$0
Recordkeeping for unfunded commitment agreements	0 hours	2 hours	\$63 (general clerk)	\$126
	0 hours	2 hours	\$96 (senior computer operator)	\$192
	0 hours	2 hours	\$368 (compliance attorney)	\$736
Total annual burden per fund	7.5 hour		\$1,317.50	\$0
Number of funds	× 1,339		× 1,339	
Total annual burden	10,043 hours		\$1,764,133	\$0
Establishing recordkeeping policies and procedures for funds engaging in reverse repurchase agreements	1.5 hours	.5 hours	\$63 (general clerk)	\$31.50
	1.5 hours	.5 hours	\$96 (senior computer operator)	\$48
	1.5 hours	.5 hours	\$368 (compliance attorney)	\$184
				\$0
				\$0
Recordkeeping for reverse repurchase agreements	0 hours	1 hour	\$63 (general clerk)	\$63
	0 hours	1 hour	\$96 (senior computer operator)	\$96
	0 hours	1 hour	\$368 (compliance attorney)	\$368
Total annual burden per fund	4.5 hour		\$790.50	\$0
Number of funds	× 181		× 181	
Total annual burden	815 hours		\$143,081	\$0
Total annual burden for all record keeping requirements	186,798 hours		\$32,813,920	\$3,121,800
Number of funds	5,203		5,203	5,203
Average annual burden per fund	35.90 hours		\$6,307	\$600

Notes:

1. These estimates include initial burden estimates annualized over a three-year period.
2. *See supra* footnote 1010 (regarding wage rates).
3. This reflects an increase to the estimate that appeared in the Proposing Release, to account for inadvertent halving of the internal time costs for the recordkeeping burdens in the Proposing Release.
4. Note that this estimate may be over-inclusive because not all funds included in this calculation will be subject to a derivatives risk management program and compliance with the rule's VaR requirements. For instance, certain leveraged/inverse funds will not be subject to compliance with the rule's VaR requirements.
5. *See supra* footnote 1010 (regarding external cost estimates). Estimates of external costs for recordkeeping burdens reflect costs that funds may pay to third parties to assist in fulfilling funds' recordkeeping duties.

8. Rule 18f-4 Total Estimated Burden

As summarized in Table 8 below, we estimate that the total hour burdens and time costs associated with rule 18f-4, amortized over three years, will result in an average aggregate annual burden of 501,275 hours and an average aggregate annual monetized time cost of \$202,443,126. We also estimate that, amortized over three years, there will be external costs of \$22,252,947 associated with this collection of information. Therefore, each fund that relies on the rule will incur an average annual burden of approximately 96.34 hours, at an average annual monetized time cost of approximately \$38,909, and an external cost of \$4,277 to comply with rule 18f-4.¹⁰³⁴

¹⁰³⁴ These per-fund burden estimates likely overestimate the total burden of rule 18f-4 because not all funds (*e.g.*, limited derivatives users) would incur the various burdens set forth in the table.

Table 8: Rule 18f-4 Total PRA Estimates

	Internal hour burden	Internal burden time cost	External cost burden
Proposed Estimates			
Derivatives risk management program	48,474 hours	\$19,195,704	\$0
Board oversight and reporting	26,930 hours	\$103,885,168 ¹	\$0
Disclosure requirement associated with limit on fund leverage risk	2,424 hours	\$816,888	\$0
Disclosure requirement associated with alternative requirements for certain leveraged/inverse funds	135 hours ²	\$45,192	\$0
Disclosure changes for money market funds	207 hours	\$69,384	\$0
Policies and procedures for limited derivatives users	5,995 hours	\$2,080,265	\$0
Recordkeeping requirements	25,455 hours	\$1,998,218 ³	\$3,054,600
Total annual burden	109,620	\$128,090,819	\$3,054,600
Number of funds	÷ 5,091	÷ 5,091	÷ 5,091
Average annual burden per fund	21.53 hours	\$25,160	\$600
Final Estimates			
Derivatives risk management program	190,854 hours	\$76,214,364	\$10,820,592
Board oversight and reporting	77,448 hours	\$76,806,288	\$4,734,009
VaR remediation	863 hours	\$542,974	\$0
Disclosure requirement associated with alternative requirements for certain leveraged/inverse funds	70 hours	\$23,800	\$0
Disclosure changes for money market funds	840 hours	\$285,600	\$0
Requirements for limited derivatives users	44,402 hours	\$15,756,180	\$3,576,546
Recordkeeping requirements	186,798 hours	\$32,813,920	\$3,121,800
Total annual burden	501,275	\$202,443,126	\$22,252,947
Number of funds	÷ 5,203	÷ 5,203	÷ 5,203
Average annual burden per fund	96.34 hours	\$38,909	\$4,277

1 This reflects an increase to the estimate that appeared in the Proposing Release (\$31,739,698), to account for a correction to the total internal time costs calculation as it appeared in the Proposing Release.

2. This reflects a reduction of the annual burden hours estimate that appeared in the Proposing Release (269 hours), to account for inadvertent doubling of the estimated burden hours in the Proposing Release.

3. This reflects an increase to the estimate that appeared in the Proposing Release (\$799,287), to account for inadvertent halving of the internal time costs for the recordkeeping burdens in the Proposing Release.

C. Rule 6c-11

Rule 6c-11 permits ETFs that satisfy certain conditions to operate without first obtaining an exemptive order from the Commission.¹⁰³⁵ We are amending rule 6c-11 to permit leveraged/inverse ETFs to rely on that rule, provided they satisfy the applicable requirements of rule 18f-4. Because we believe this amendment will increase the number of funds relying on rule 6c-11, we are updating the PRA analysis for rule 6c-11 to account for the aggregate burden

¹⁰³⁵ See *supra* footnotes 613-616 and accompanying text.

increase that will result from this increase in respondents to that rule. We are not updating the rule 6c-11 PRA analysis in any other respect.

Rule 6c-11 requires an ETF to disclose certain information on its publicly-available website, to maintain certain records, and to adopt and implement certain written policies and procedures. The purpose of these collections of information is to provide useful information to investors who purchase and sell ETF shares in secondary markets and to allow the Commission to better monitor reliance on rule 6c-11 and will assist the Commission with its accounting, auditing and oversight functions. Information provided to the Commission in connection with staff examinations or investigations will be kept confidential subject to the provisions of applicable law.

The respondents to rule 6c-11 will be ETFs registered as open-end management investment companies other than share class ETFs and non-transparent ETFs. This collection will not be mandatory, but will be necessary for those ETFs seeking to operate without individual exemptive orders, including all ETFs whose existing exemptive orders will be rescinded.

Under the currently approved PRA estimates, 1,735 ETFs would be subject to these requirements. The current PRA estimates for rule 6c-11 include 74,466.2 total internal burden hours, \$24,771,740.10 in internal time costs, and \$1,735,000 in external time costs.

In the Proposing Release, we estimated that the proposed amendments to rule 6c-11 would result in an additional 164 leveraged/inverse ETFs relying on that rule, resulting in an increase in the number of respondents to 1,899 ETFs. This updated number of respondents resulted in a total of 81,505.08 burden hours, \$27,113,276.34 in internal time costs, and \$1,899,000 in external costs.

We did not receive public comment relating to the PRA estimates for rule 6c-11 in the Proposing Release. We continue to believe that the current annual burden and cost estimates for rule 6c-11 are appropriate, but that the amendments to rule 6c-11 will result in an increase in the number of respondents. Specifically, we estimate that an additional 172 ETFs (all

leveraged/inverse ETFs) will rely on rule 6c-11, resulting in an increase in the number of respondents to 1,907 ETFs. Table 9 below summarizes these revisions to the estimated annual responses, burden hours, and burden-hour costs based on the amendments to rule 6c-11.

Table 9: Rule 6c-11 PRA Estimates

	Currently approved annual internal hour burden ¹	Updated estimated annual internal hour burden ²	Currently approved annual internal burden time cost	Updated estimated annual internal time burden cost	Currently approved annual external cost burden	Updated estimated annual external cost burden
Website disclosure	33,398.75 hours	36,709.75 hours	\$10,717,945.15	\$11,780,473.43	\$1,735,000	\$1,907,000
Recordkeeping	8,675 hours	9,535 hours	\$680,987.50	\$748,497.50	\$0	\$0
Policies and procedures	32,392.45 hours	35,603.69 hours	\$13,372,807.45	\$14,698,526.69	\$0	\$0
Total annual burden	74,466.2 hours	81,848.44 hours	\$24,771,740.10	\$27,227,497.62	\$1,735,000	\$1,907,000
Number of affected ETFs	÷ 1,735	÷ 1,907	÷ 1,735	÷ 1,907	÷ 1,735	÷ 1,907
Average annual burden per ETF	42.92 hours	42.92 hours	\$14,277.66	\$14,277.66	\$1,000	\$1,000

Notes:

1. The previously approved burdens and costs in this table are based on the currently approved estimate of 1,735 ETFs relying on rule 6c-11.
2. The updated estimated burdens and costs in this table are based on an estimate of 172 leveraged/inverse ETFs that will rely on rule 6c-11 pursuant to the amendments to that rule, for a total estimate of 1,907 ETFs that will rely on rule 6c-11.

D. Form N-PORT

We are amending Form N-PORT to add new items to Part B (“Information About the Fund”), as well as to make certain amendments to the form’s General Instructions.

Form N-PORT, as amended, will require funds that are limited derivatives users under final rule 18f-4 to provide information about their derivatives exposure, and exceedances of their derivatives exposure over 10% of their net assets.¹⁰³⁶ It also will require funds that are subject to the limit on fund leverage risk in rule 18f-4 to provide certain information about the fund’s VaR during the reporting period.¹⁰³⁷ The final amendments to Form N-PORT incorporate several modifications from the proposal: (1) the proposed requirements would have required all funds, not just limited derivatives users, to report derivatives exposure information; (2) the proposed requirements did not include the requirement for funds that are limited derivatives users to report exceedances of their derivatives exposure over the 10% threshold; and (3) the final VaR reporting requirements decrease the number of reported items that the proposal would have required and make certain VaR-related information non-public. We estimate that 5,133 funds in the aggregate, consisting of 2,437 limited derivatives users and 2,696 funds that are subject to the VaR-based limit on fund leverage risk, will be subject to aspects of the Form N-PORT reporting requirements in the final rule.

Preparing reports on Form N-PORT is mandatory for all management investment companies (other than money market funds and small business investment companies) and UITs that operate as ETFs and is a collection of information under the PRA. Responses to the reporting requirements will be kept confidential, subject to the provisions of applicable law, for reports filed with respect to the first two months of each quarter. The information that funds will report regarding limited derivatives users’ derivatives exposure and exceedances of the 10% derivatives exposure threshold, information about a fund’s median daily VaR and median VaR Ratio, as applicable, and VaR backtesting exceptions will not be made publicly available. All

¹⁰³⁶ See Item B.9 of Form N-PORT; *supra* section II.G.1.a.

¹⁰³⁷ See Item B.10 of Form N-PORT; *see supra* section II.G.1.b.

other responses to the new Form N-PORT reporting requirements for the third month of the quarter will not be kept confidential, but made public sixty days after the quarter end. Form N-PORT is designed to assist the Commission in its regulatory, disclosure review, inspection, and policymaking roles, and to help investors and other market participants better assess different fund products.¹⁰³⁸

Based on current PRA estimates, we estimate that funds prepare and file their reports on Form N-PORT either by (1) licensing a software solution and preparing and filing the reports in house, or (2) retaining a service provider to provide data aggregation, validation and/or filing services as part of the preparation and filing of reports on behalf of the fund. We estimate that 35% of funds subject to the N-PORT filing requirements will license a software solution and file reports on Form N-PORT in house, and the remainder will retain a service provider to file reports on behalf of the fund.

Table 10 below summarizes our initial and ongoing annual burden estimates associated with the amendments to Form N-PORT. One commenter broadly opposed any new Form N-PORT reporting requirements on the grounds that they generally increase burdens on funds, but did not comment on PRA related burdens specifically.¹⁰³⁹ Otherwise, the Commission did not receive comments specifically addressing the estimated burdens associated with the proposed Form N-PORT reporting requirements. We have adjusted the proposal's estimated annual burden hours and total time costs, on account of the modifications to the proposed Form N-PORT requirements that we are adopting.

¹⁰³⁸ The specific purposes for each of the new reporting items are discussed in section II.G.1 *supra*.

¹⁰³⁹ ISDA Comment Letter.

Table 10: Form N-PORT PRA Estimates

	Internal initial burden hours	Internal annual burden hours		Wage rate ¹	Internal time costs	Initial external cost burden	Annual external cost burden
PROPOSED ESTIMATES							
Report derivatives exposure information	2 hours	4.33 hours ^{2,3}	×	\$365 (compliance attorney)	\$1,580		
	2 hours	4.33 hours	×	\$331 (senior programmer)	\$1,433		
Total new burden for derivatives exposure information		8.66 hours			\$3,013		
Number of funds for derivatives exposure information		× 5,091			× 5,091		
Total new annual burden for derivatives exposure information (I)		44,088 hours			\$15,339,183		
Report VaR-related information	2 hours	4.33 hours	×	\$365 (compliance attorney)	\$1,580	\$5,590	\$4,210
	2 hours	4.33 hours	×	\$331 (senior programmer)	\$1,433		
Total new burden for VaR-related information		8.66 hours			\$3,013		
Number of funds for VaR-related information		× 2,424			× 2,424		
Total new annual burden for VaR- related information (II)		20,992 hours			\$7,303,512		
Total new annual burden (I + II)		65,080 hours			\$22,642,695		\$21,433,110⁴
Current burden estimates		1,803,826 hours					\$103,776,240
Revised burden estimates		1,868,906 hours					\$125,209,350
FINAL ESTIMATES							
Report derivatives exposure information for limited derivative users	2 hours	4.33 hours ²	×	\$368 (compliance attorney)	\$1,593		\$912 ⁵
	2 hours	4.33 hours	×	\$334 (senior programmer)	\$1,446		
Total new burden for derivatives exposure information for limited derivatives users		8.66 hours			\$3,039		
Number of funds		× 2,437			× 2,437		× 2,437
Total new annual burden for limited derivatives user derivatives exposure information (I)		21,104 hours			\$7,406,043		\$2,222,544⁶
Report exceedance of 10% derivatives exposure threshold for limited derivatives users	0 hours	0.01 hours	×	\$368 (compliance attorney)	\$3.68		

	0 hours	0.01 hours	×	\$334 (senior programmer)	\$3.34	
Total new burden for exceedance-related information		0.02 hours			\$7.02	
Number of funds		× 2,437			× 2,437	
Total new annual burden for limited derivatives users exceedance-related information (II)		48.74 hours			\$ 17,108	
Report VaR-related information	2 hours	4.33 hours	×	\$368 (compliance attorney)	\$1,593	\$912 ⁵
	2 hours	4.33 hours	×	\$334 (senior programmer)	\$1,446	
Total new burden for VaR-related information		8.66 hours			\$3,039	
Number of funds		× 2,696			× 2,696	× 2,696
Total new annual burden for VaR-related information (III)		23,347 hours			\$8,193,144	\$2,458,752
Total new annual burden (I + II + III)		44,500 hours			\$15,616,295	\$4,681,296
Current burden estimates		1,803,826 hours				\$103,776,240
Revised burden estimates		1,848,326 hours				\$108,457,536

Notes:

1. See *supra* footnote 1010 (regarding wage rates). These PRA estimates assume that the same types of professionals will be involved in the reporting requirements that we believe otherwise will be involved in preparing and filing reports on Form N-PORT.
2. Includes initial burden estimates annualized over a three-year period.
3. This estimate assumes that, annually after the initial 2 hours to comply with the new N-PORT requirements, each of a compliance attorney and a senior programmer will incur 1 burden hour per filing associated with the new reporting requirements. The estimate of 4.33 hours is based on the following calculation: ((2 hours for the first filing × 1 = 2) + (3 additional filings in year 1 × 1 hour for each of the additional 3 filings in year 1 = 3) + (4 filings in years 2 and 3 × 1 hour per filing × 2 years) = 8) / 3 = 4.33.
4. This estimate is based on the following calculation: \$4,210 (average costs for funds reporting the information on Form N-PORT) × 5,091 funds (which includes funds reporting derivative exposure information and VaR-related information).
5. This estimate is based on the following information and calculations: (35% × \$4,805 (the average cost to license a third-party software solution per year) = \$1,681.75) + (65% × \$11,440 (the average cost of retaining the services of a third-party vendor to prepare and file reports on Form N-PORT on the fund's behalf) = \$7,436) = basis for existing external N-PORT filing costs. We estimate that the new N-PORT requirements will add an additional 10% costs (e.g., (\$1,681.75 + \$7,436 = \$9,117.75) × 10% = \$912 per fund).
6. This estimate of the external annual cost burden of Form N-PORT reporting for limited derivatives users encompasses any external costs burdens associated with reporting derivatives exposure and any reporting related to exceedances of the 10% derivatives exposure threshold on the Form N-PORT.

E. Form N-RN and Rule 30b1-10

We are amending Form N-LIQUID (which we are re-titling as “Form N-RN”) to add new reporting requirements for funds subject to the VaR-based limit on fund leverage risk pursuant to rule 18f-4 as well as conforming amendments to rule 30b1-10.¹⁰⁴⁰ We are adopting these requirements substantially as proposed, with conforming amendments to reflect changes to the proposed VaR requirements in the final rule.

A fund that determines that it is out of compliance with the VaR test and has not come back into compliance within five business days after such determination will have to file a non-public report on Form N-RN providing certain information regarding its VaR test breaches.¹⁰⁴¹ In addition, a fund that has come back into compliance with either the relative VaR test or the absolute VaR test, as applicable, must file a report on Form N-RN within one business day to indicate that. We estimate that 2,696 funds per year will be required to comply with either of the VaR tests, and the Commission will receive approximately 54 filing(s) in aggregate per year in response to the new VaR-related items that we proposed to include on Form N-RN, as amended.¹⁰⁴²

Pursuant to the amendments to Form N-RN, preparing a report on this form will be mandatory for any fund that is out of compliance with its applicable VaR test for more than five business days, and for any fund that has come back into compliance with its applicable VaR test. A report on Form N-RN is a collection of information under the PRA. The VaR test breach information provided on Form N-RN, as well as the information a fund provides when it has come back into compliance, will enable the Commission to receive information on events that

¹⁰⁴⁰ See Parts E, F, and G of Form N-RN; *see also supra* section II.G.2 (noting that, in addition to registered open-end funds, the scope of funds that will be subject to the requirements of Form N-RN will expand to include registered closed-end funds and BDCs).

¹⁰⁴¹ *See supra* footnote 688. For purposes of this PRA analysis, the burden associated with the amendments to rule 30b1-10 and rule 18f-4(c)(7) is included in the collection of information requirements for Form N-RN.

¹⁰⁴² The estimate at proposal was 30 filings in aggregate per year. *See* Proposing Release, *supra* footnote 1, at n.682 and accompanying text. However, in a modification from the calculation at proposal, the final PRA analysis increases this total by approximately 75% to 54 filings in aggregate per year.

could impact funds' leverage-related risk more uniformly and efficiently and will enhance the Commission's oversight of funds when significant fund and/or market events occur. The Commission will be able to use the newly required information that funds will provide on Form N-RN in its regulatory, disclosure review, inspection, and policymaking roles. Responses to the reporting requirements and this collection of information will be kept confidential, subject to provisions of applicable law.

Table 11 below summarizes our initial and ongoing annual burden estimates associated with preparing current reports in connection with the amendments we are adopting to funds' current reporting requirements. Staff estimates there will be no external costs associated with this collection of information. We further assume similar hourly and cost burdens, as well as similar response rates, for responses to either a breach of the absolute VaR test or the relative VaR test. Our assumptions furthermore take into account that the information that funds must report on Form N-RN regarding a VaR test breach includes data that will be available to funds in connection with their compliance with rule 18f-4, and therefore funds will not need to obtain or compile this information anew when they prepare reports on Form N-RN. Several commenters expressed that the proposed rule would result in more breaches of the VaR limits than estimated by the Commission at proposal.¹⁰⁴³ Although the final rule provides incremental higher VaR limits than proposed, we have increased the number of funds that we expect to be subject to the VaR-related items on Form N-RN to reflect the potential that there could be more VaR limit breaches than we had initially estimated. We have also adjusted the proposal's estimated annual burden hours and total time costs to reflect the Commission's updated views on typical time burdens associated with similar reporting requirements.

¹⁰⁴³ See *supra* sections II.D.2 and II.D.3 (discussing requests from commenters to raise both the relative VaR and absolute VaR limits in the proposal).

Table 11: Form N-RN PRA Estimates

	Internal initial burden hours	Internal annual burden hours		Wage rate ¹	Internal time costs
PROPOSED ESTIMATES					
Relative or absolute VaR test breach reports	0 hour	0.005 hours	×	\$365 (compliance attorney)	\$1.83
	0 hour	0.005 hours	×	\$331 (senior programmer)	\$1.66
Total new annual burden per fund		0.01 hours			\$3.49
Number of funds		× 2,424			× 2,424
Total new annual burden		24 hours			\$8,460
Current burden estimates		941 hours			
Revised burden estimates		965 hours			
FINAL ESTIMATES					
Relative or absolute VaR test breach reports	0 hour	0.06 hours ²	×	\$368 (compliance attorney)	\$22.08
	0 hour	0.02 hours ²	×	\$334 (senior programmer)	\$6.68
Total new annual burden per fund		0.08 hours			\$28.76
Number of funds		× 2,696			× 2,696
Total new annual burden		216 hours			\$77,537
Current burden estimates		941 hours			
Revised burden estimates		1,157 hours			

Notes:

1. See *supra* footnote 1010 (regarding wage rates). These PRA estimates assume that the same types of professionals will be involved in the reporting requirements that we believe otherwise will be involved in preparing and filing reports on Form N-RN.
2. This estimate is based on the assumption that, of the 2,696 funds that will be required to comply with either of the VaR tests, on average the Commission will receive 54 reports regarding a relative or absolute VaR test breach (representing 1% of funds (2,696 × 1% = 27 funds) filing twice (27 funds × 2 = 54 filings), once upon initial breach and once upon coming back into compliance). We estimate that a compliance attorney will spend 3 hours, and a senior programmer will spend 1 hour, preparing and submitting each report. However, because we estimate that only 1% of funds will have to file Form N-RN each year because they breach the relative or absolute VaR test, the estimated hour burden is being decreased by 99%. (3 hours × 1%) × 2 filings (one on initial breach and one when back in compliance) = 0.06 hours (for a compliance attorney); (1 hour × 1%) × 2 filings (one on initial breach and one when back in compliance) = 0.02 hours (for a senior programmer).

F. Form N-CEN

Form N-CEN is a structured form that requires registered funds to provide census-type information to the Commission on an annual basis. We are amending Form N-CEN to require a fund to identify whether it relied on rule 18f-4 during the reporting period and whether the fund has relied on certain provisions of the rule, substantially as proposed.¹⁰⁴⁴ In a modification from the proposal, we also are amending Form N-CEN to require a fund to identify whether it has invested in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, in reliance on the final rule.

Preparing a report on Form N-CEN, as amended, will be mandatory for all registered funds, including money market funds. Responses will not be kept confidential. We estimate that 5,524 funds will be subject to the amendments to the Form N-CEN reporting requirements.¹⁰⁴⁵

The purpose of Form N-CEN is to satisfy the filing and disclosure requirements of section 30 of the Investment Company Act, and of amended rule 30a-1 thereunder. The information required to be filed with the Commission assures the public availability of the information and is designed to facilitate the Commission's oversight of registered funds and its ability to monitor trends and risks.

Table 12 below summarizes our initial and ongoing annual burden estimates associated with the amendments to Form N-CEN based on current Form N-CEN practices and burdens associated with minor amendments to the form. Staff estimates there will be no external costs associated with this collection of information. One commenter broadly opposed any new Form N-CEN reporting requirements on the grounds that they generally increase burdens on

¹⁰⁴⁴ See *supra* section II.G.3.

¹⁰⁴⁵ We estimate that the number of funds that will be subject to the amendments to the Form N-CEN reporting requirements includes the number of funds that we estimate will be required to comply with the derivatives risk management program requirement (2,766 funds), plus the number of funds that we estimate will qualify as limited derivatives users (2,437 funds), plus the number of money market funds (420 funds), minus BDCs, which are not required to report on Form N-CEN (99 BDCs). $2,766 + 2,437 + 420 - 99 = 5,524$.

funds, but did not comment on PRA related burdens specifically.¹⁰⁴⁶ We have adjusted the proposal's estimated annual burden hours and total time costs, on account of the additions to the proposed Form N-CEN requirements that we are adopting and the Commission's updated views on typical time burdens associated with similar reporting requirements.

Table 12: Form N-CEN PRA Estimates

	Internal initial burden hours	Internal annual burden hours		Wage rate ¹	Internal time costs
PROPOSED ESTIMATES					
Reporting derivatives-related fund	0 hour	0.01 hours ²	×	\$365 (compliance attorney)	\$3.7
census information	0 hour	0.01 hours	×	\$331 (senior programmer)	\$3.3
Total new annual burden per fund		0.02 hours			\$7
Number of funds		× 12,375			× 12,375
Total new annual burden		248 hours			\$86,625
Current burden estimates		74,425 hours			
Revised burden estimates		74,673 hours			
FINAL ESTIMATES					
Reporting derivatives-related fund	0 hour	0.2 hours ³	×	\$368 (compliance attorney)	\$73.60
census information	0 hour	0.2 hours	×	\$334 (senior programmer)	\$66.80
Total new annual burden per fund		0.4 hours			\$140.40
Number of funds		× 5,524			× 5,524
Total new annual burden		2,210 hours			\$775,570
Current burden estimates		74,598 hours			
Revised burden estimates		76,808 hours			

Notes:

1. See *supra* footnote 1010 (regarding wage rates). These PRA estimates assume that the same types of professionals will be involved in the reporting requirements that we believe otherwise will be involved in preparing and filing reports on Form N-CEN.
2. This estimate assumes each fund reporting on Form N-CEN will spend approximately 1 minute reporting these new data elements.
3. This estimate assumes each fund reporting on Form N-CEN will spend approximately 10 minutes reporting these new data elements.

V. FINAL REGULATORY FLEXIBILITY ANALYSIS

The Commission has prepared the following Final Regulatory Flexibility Analysis (“FRFA”) in accordance with section 604 of the Regulatory Flexibility Act (“RFA”).¹⁰⁴⁷ It relates to new rule 18f-4 and the final amendments to Forms N-PORT, N-LIQUID (re-titled “Form N-RN”), and N-CEN.¹⁰⁴⁸ An Initial Regulatory Flexibility Analysis (“IRFA”) was prepared in accordance with the RFA and included in the Proposing Release.¹⁰⁴⁹

A. Need for and Objectives of the Rule and Form Amendments

The Commission is adopting new rule 18f-4, as well as amendments to rule 6c-11, and Forms N-PORT, N-LIQUID (re-titled N-RN), and N-CEN. This final rule, and final rule amendments, are designed to address the investor protection purposes and concerns underlying section 18 of the Investment Company Act and to provide an updated and more comprehensive approach to the regulation of funds’ use of derivatives and the other transactions covered by rule 18f-4.¹⁰⁵⁰

Rule 18f-4 is designed to provide an updated, comprehensive approach to the regulation of funds’ use of derivatives and certain other transactions, generally through the implementation of a derivatives risk management program, limits on fund leverage risk, board oversight and reporting, and related recordkeeping requirements.¹⁰⁵¹ The amendments to Forms N-PORT, N-

¹⁰⁴⁷ 5 U.S.C. 604.

¹⁰⁴⁸ As discussed above, we do not believe the conforming amendments to Form N-2 (clarifying that funds do not have to disclose in their senior securities table the derivatives transactions and unfunded commitment agreements entered into in reliance on rule 18f-4) or rule 22e-4 and Form N-PORT (removing references to assets “segregated to cover” rendered obsolete by rule 18f-4) result in any new reporting, recordkeeping, or compliance burdens. *See supra* footnote 1007.

Similarly, we do not believe the conforming amendment to rule 30b1-10 (adding registered closed-end funds to the scope of this rule, reflecting the requirement in final rule 18f-4 for all funds that experience certain VaR breach events to report information about these events confidentially to the Commission on Form N-RN) result in any new reporting, recordkeeping, or compliance burdens. *See supra* footnote 1007.

¹⁰⁴⁹ *See* Proposing Release *supra* footnote 1, at section VI.

¹⁰⁵⁰ *See supra* section I.B (discussing the requirements of section 18, and as well as Congress’ concerns underlying the limits of section 18). Other transactions specified in the rule include reverse repurchase agreements and similar financing transactions, unfunded commitments, and when-issued, forward-settling, and non-standard settlement cycle securities.

¹⁰⁵¹ *See supra* section II.A.

LIQUID (re-titled N-RN), and N-CEN will enhance the Commission’s ability to effectively oversee funds’ use of the rule and provide the Commission and the public with additional information regarding funds’ use of derivatives.¹⁰⁵² All of these requirements are discussed in detail in section II of this release. The costs and burdens of these requirements on small funds are discussed below, as well as above in our Economic Analysis and Paperwork Reduction Act Analysis, which discuss the applicable costs and burdens on funds.¹⁰⁵³

B. Significant Issues Raised by Public Comments

In the Proposing Release, we requested comment on every aspect of the IRFA, including the number of small entities that would be affected by the proposed rule and form amendments, the existence or nature of the potential impact of the proposals on small entities discussed in the analysis, and how to quantify the impact of the proposed amendments. We also requested comment on the proposed compliance burdens and the effect these burdens would have on smaller entities.

Although we did not receive comments specifically addressing the IRFA, some commenters noted the impact of certain aspects of proposed rule 18f-4 on smaller funds.¹⁰⁵⁴ Commenters in particular expressed concern that the proposed requirements concerning the appointment of a derivatives risk manager could adversely affect smaller funds. One commenter that urged the Commission to permit the fund’s adviser to serve as the derivatives risk manager, instead of requiring the board to consider and select an individual to serve in this role, cited unspecified cost burdens, particularly for smaller funds, associated with the proposed approach.¹⁰⁵⁵ Another commenter generally supported the proposed requirement for an individual to serve as the derivatives risk manager, but expressed concern “that the specificity of the requirements could hamstring smaller and mid-sized investment managers in particular

¹⁰⁵² See *supra* section II.G.

¹⁰⁵³ See *supra* sections III and IV.

¹⁰⁵⁴ See, e.g., IDC Comment Letter; SIFMA AMG Comment Letter; ABA Comment Letter; NYC Bar Comment Letter; Dechert Comment Letter I. We did not receive any comments discussing the impact of amendments to rules 6c-11, 22e-4 or 30b1-10 on smaller funds.

¹⁰⁵⁵ IDC Comment Letter; see also *supra* section II.B.1.

whose key personnel often carry out multiple responsibilities.”¹⁰⁵⁶ Similarly, one commenter stated that smaller firms may have significant difficulty complying with the proposed requirement that a fund’s derivatives risk management functions be reasonably segregated from the fund’s portfolio management functions because “the portfolio managers may be the principal employees possessing the essential derivatives experience and hiring a person to be a separate [derivatives risk manager] may not be economical (and may not represent full time employment).”¹⁰⁵⁷

In addition to discussing the derivatives risk manager requirement in particular, commenters observed that the proposed rule’s requirements as a whole could adversely affect smaller funds. One commenter described the impact of the rule’s requirements generally on smaller funds, stating that like larger fund complexes, “smaller fund complexes may need to significantly increase the financial and human capital resources to meet the detailed requirements under the Proposed Rule,” and “[f]und complexes of all sizes may need to draft licensing agreements and engage in due diligence regarding the capabilities of potential vendors.”¹⁰⁵⁸ Another commenter urged us to broadly exempt from the rule funds sold exclusively to accredited investors, qualified purchasers, or qualified clients, stating that “a small advisory organization that offers a closed-end fund or BDC to Qualifying Investors, as an extension of its sponsorship of private funds, may not have the resources to hire and maintain separate risk personnel, including a [derivatives risk manager], or develop and maintain a [derivatives risk management program].”¹⁰⁵⁹ Several commenters that recommended extending the transition period for all funds beyond the one-year period we proposed noted a longer timeframe could be particularly beneficial to smaller funds. One commenter stated that “certain smaller and midsize investment advisers that serve as subadvisers to registered funds would benefit from more time

¹⁰⁵⁶ SIFMA AMG Comment Letter.

¹⁰⁵⁷ ABA Comment Letter.

¹⁰⁵⁸ Dechert Comment Letter I.

¹⁰⁵⁹ NYC Bar Comment Letter.

to meet these implementation challenges.”¹⁰⁶⁰ Similarly, another commenter suggested that a longer transition period would be useful for smaller funds with limited resources that may need to hire additional personnel or redirect current resources in order to comply with the new requirements.¹⁰⁶¹

After considering the comments we received, we are adopting the proposed rule and form amendments, with certain modifications intended to reduce many of the operational challenges commenters identified. For example, we are adopting certain changes to the proposal that will be cost-reducing to all funds, including small funds, such as requiring weekly backtesting, instead of daily, as proposed.¹⁰⁶² This release also clarifies that the final rule provides flexibility for the fund’s derivatives risk manager to rely on others, such as employees of the fund’s adviser, in carrying out activities associated with the fund’s derivatives risk management.¹⁰⁶³ We believe that this flexibility will benefit all funds, including smaller funds. We also believe there will be certain compliance efficiencies associated with raising the relative and absolute VaR limits to 200% and 20%, respectively, which match the VaR limits in the UCITS framework, and could benefit small funds with an adviser that also manages UCITS funds.¹⁰⁶⁴ While the proposal would have required all funds to report their derivatives exposure, the final amendments we are adopting will require only a fund that relies on the limited derivatives exception in rule 18f-4 to report its derivatives exposure on Form N-PORT, which will reduce reporting burdens on any smaller funds that do not rely on the exception.¹⁰⁶⁵ In addition, we are adopting an eighteen-month transition period, instead of the proposed one-year transition period, which provides more time for all funds, including smaller funds, to comply with the new requirements.¹⁰⁶⁶

¹⁰⁶⁰ ICI Comment Letter.

¹⁰⁶¹ Dechert Comment Letter I.

¹⁰⁶² *See supra* section II.B.2.d.

¹⁰⁶³ *See supra* section II.B.1.

¹⁰⁶⁴ *See supra* footnote 376.

¹⁰⁶⁵ *See supra* section II.G.1.b.

¹⁰⁶⁶ *See supra* section II.L.

C. Small Entities Subject to the Final Rule

An investment company is a small entity if, together with other investment companies in the same group of related investment companies, it has net assets of \$50 million or less as of the end of its most recent fiscal year.¹⁰⁶⁷ Commission staff estimates that, as of June 2020, approximately 40 registered mutual funds, 8 registered ETFs, 26 registered closed-end funds, and 12 BDCs (collectively, 86 funds) were small entities.¹⁰⁶⁸

D. Projected Reporting, Recordkeeping, and Other Compliance Requirements

The new rule and form amendments will impact current reporting, recordkeeping and other compliance requirements for funds, including those considered to be small entities.

1. Rule 18f-4

a. Derivatives Risk Management Program, and Board Oversight and Reporting

Rule 18f-4 will generally require a fund relying on the rule when engaging in derivatives transactions—including small entities, but not funds that are limited derivatives users—to adopt and implement a derivatives risk management program.¹⁰⁶⁹ This derivatives risk management program will include policies and procedures reasonably designed to assess and manage the risks of the fund’s derivatives transactions. The program requirement is designed to permit a fund to tailor the program’s elements to the particular types of derivatives that the fund uses and related risks, as well as how those derivatives impact the fund’s investment portfolio and strategy. The final rule will require a fund’s program to include the following elements: (1) risk identification and assessment; (2) risk guidelines; (3) stress testing; (4) backtesting; (5) internal reporting and escalation; and (6) periodic review of the program. The final rule also will require: (1) a fund’s board of directors to approve the designation of the fund’s derivatives risk manager and (2) the

¹⁰⁶⁷ Rule 0-10(a) under the Investment Company Act [17 CFR 270.0-10(a)]. Recognizing the growth in assets under management in investment companies since rule 0-10(a) was adopted, the Commission plans to revisit the definition of a small entity in rule 0-10(a).

¹⁰⁶⁸ This estimate is derived from an analysis of data obtained from Morningstar Direct as well as data reported to the Commission for the period ending June 2020. This estimate of small entities include one money market fund, which has net assets of less than \$100,000.

¹⁰⁶⁹ See *supra* section II.B; see also rule 18f-4(c)(1).

derivatives risk manager to provide written reports to the board regarding the program's implementation and effectiveness.¹⁰⁷⁰

As discussed above, we estimate that the one-time operational costs necessary to establish and implement a derivatives risk management program will range from \$150,000 to \$500,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund.¹⁰⁷¹ We also estimate that each fund will incur ongoing program-related costs that range from 65% to 75% of the one-time costs necessary to establish and implement a derivatives risk management program, or approximately \$97,500 to \$375,000.¹⁰⁷² We estimate that approximately 21% of funds will be required to implement a derivatives risk management program, including board oversight.¹⁰⁷³ We therefore similarly estimate that approximately 21% of small funds, or approximately 18 small funds, will establish a derivatives risk management program.¹⁰⁷⁴

There are different factors that will affect whether a smaller fund incurs program-related costs that are on the higher or lower end of the estimated range. For example, we would expect that smaller funds that are not part of a fund complex—or their advisers—may not have existing personnel capable of fulfilling the responsibilities of the derivatives risk manager. Some smaller funds may have more limited employee resources, making it more difficult to segregate the portfolio management and derivatives risk management function. In addition, some smaller entities may choose to hire a derivatives risk manager rather than assigning that responsibility to a current officer or officers of the fund's investment adviser who is not a portfolio manager and has the requisite experience. Also, while we would expect larger funds or funds that are part of a

¹⁰⁷⁰ See *supra* sections II.C and III.C.1.

¹⁰⁷¹ See *supra* section III.C.1. This section, along with sections IV.B.1 and IV.B.2, also discusses the professional skills that we believe compliance with this aspect of the final rule will entail.

¹⁰⁷² See *supra* footnote 847.

¹⁰⁷³ See *supra* footnote 849 and accompanying text (estimating that 21% of funds, or 2,766 funds total, will be required to implement a derivatives risk management program). These are funds that hold some derivatives and will not qualify as a limited derivatives user under the final rule.

¹⁰⁷⁴ We estimate that there are 86 small funds that meet the small entity definition. See *supra* footnote 1068 and accompanying text. $86 \text{ small funds} \times 21\% = \text{approximately } 18 \text{ funds}$ that are small entities that will be required to implement a derivatives risk management program.

large fund complex to incur higher program-related costs in absolute terms relative to a smaller fund or a fund that is part of a smaller fund complex, a smaller fund may find it more costly, per dollar managed, to comply with the derivatives risk management program requirement because it will not be able to benefit from a larger fund complex's economies of scale.¹⁰⁷⁵

b. Limit on Fund Leverage Risk

Rule 18f-4 will generally require a fund relying on the rule to engage in derivatives transactions to comply with an outer limit on fund leverage risk based on VaR.¹⁰⁷⁶ This requirement is applicable to small entities, except for those that are limited derivatives users or that are leveraged/inverse funds that cannot comply with the VaR limit and meet other conditions, as the rule describes. This outer limit is based on a relative VaR test that compares the fund's VaR to the VaR of a designated reference portfolio. If the fund's derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, the fund will be required to comply with an absolute VaR test. In either case, a fund must apply the test at least once each business day. This requirement is designed to limit fund leverage risk consistent with the investor protection purposes underlying section 18.

As discussed above, we estimate that the one-time operational costs necessary to establish and implement a VaR calculation model consistent with the limit on fund leverage risk will range from \$5,000 to \$100,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund.¹⁰⁷⁷ We estimate that approximately 21% of funds will be required to comply with the limit on fund leverage

¹⁰⁷⁵ See *supra* section III.C.1.

¹⁰⁷⁶ See *supra* sections II.D, II.E, and II.F.

¹⁰⁷⁷ See *supra* section III.C.2. This section also discusses the professional skills that we believe compliance with this aspect of the final rule will entail.

risk.¹⁰⁷⁸ We therefore similarly estimate that approximately 21% of small funds, or approximately 18 small funds, will be required to comply with the limit on fund leverage risk.¹⁰⁷⁹

There are multiple factors that could affect whether the costs that smaller funds will incur in complying with the limit on fund leverage risk will be on the lower versus higher end of this estimated range. To the extent that funds (including smaller funds) have already established and implemented portfolio VaR testing practices and procedures, these funds will incur fewer costs relative to those funds that have not already established and implemented VaR-based analysis in their risk management. As a result of fewer resources, a smaller fund, and more specifically a smaller fund not part of a fund complex, may be particularly likely to hire a third-party vendor to comply with the VaR-based limit on fund leverage risk, which could increase costs of complying with the limit for those funds. Finally, costs will vary based on factors such as whether the fund uses multiple types of derivatives or uses derivatives more extensively, whether the fund implements the absolute VaR test versus the relative VaR test, and whether (for a fund that uses the relative VaR test) the fund uses a designated reference portfolio for which the index provider charges a licensing fee.¹⁰⁸⁰

c. Requirements for Limited Derivatives Users

Rule 18f-4 includes an exception from the rule's derivatives risk management program requirement and limit on fund leverage risk for "limited derivatives users."¹⁰⁸¹ The exception is available to a fund that limits its derivatives exposure to 10% of its net assets, excluding derivatives transactions used to hedge certain currency and/or interest rate risks. A fund that relies on the exception—small funds as well as large funds—will also be required to adopt

¹⁰⁷⁸ See *supra* text following footnote 857 (estimating that 21% of funds, or 2,696 funds total, will be required to implement VaR tests). This estimate excludes both: (1) limited derivatives users, and (2) funds that are leveraged/inverse funds that cannot comply with the VaR limit and meet other conditions, as the rule describes.

¹⁰⁷⁹ We estimate that there are 86 small funds that meet the small entity definition. See *supra* footnote 1068 and accompanying text. 86 small funds x 21% = approximately 18 funds that are small entities that will be subject to a VaR test.

¹⁰⁸⁰ See *supra* footnote 880 and accompanying paragraph.

¹⁰⁸¹ See *supra* section II.E; rule 18f-4(c)(4).

policies and procedures that are reasonably designed to manage its derivatives risks. In a change from the proposal, the final rule provides two alternative paths for remediation for limited derivatives users that are out of compliance with the 10% derivatives exposure threshold requirement.¹⁰⁸² We believe that the risks and potential impact of these funds' derivatives use may not be as significant, compared to those of funds that do not qualify for the exception, and that a principles-based policies and procedures requirement will appropriately address these risks. These "reasonably designed" policies and procedures will have a scope that reflects the extent and nature of a fund's use of derivatives within the parameters that the exception provides.

As discussed above, we estimate that the one-time costs to establish and implement policies and procedures reasonably designed to manage a fund's derivatives risks will range from \$15,000 to \$100,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund.¹⁰⁸³ We also estimate that the ongoing annual costs that a fund that is a limited derivatives user will incur range from 65% to 75% of the one-time costs to establish and implement the policies and procedures. Thus, we estimate that a fund will incur ongoing annual costs associated with the limited derivatives user exception that will range from \$9,750 to \$75,000.¹⁰⁸⁴ We anticipate that larger funds that are limited derivatives users—or limited derivatives user funds that are part of a large fund complex—will likely experience economies of scale in complying with the requirements for limited derivatives users that smaller funds will not necessarily experience.¹⁰⁸⁵ Thus, smaller funds that are limited derivatives users could incur costs on the higher end of the estimated range. However, a smaller fund whose derivatives use is limited could benefit from the limited derivatives user exception

¹⁰⁸² See *supra* section II.E.4.

¹⁰⁸³ See *supra* section III.C.3 (discussing the one-time range of costs for implementing the limited derivatives user requirements under rule 18f-4 and the variables impacting a fund incurring costs at the lower or higher end of the estimated cost range). This section, along with section IV.B.6, also discusses the professional skills that we believe compliance with this aspect of the rule will entail.

¹⁰⁸⁴ See *supra* footnote 892.

¹⁰⁸⁵ See *supra* footnote 1075 and accompanying text.

because it will not be required to adopt a derivatives risk management program (including all of the program elements).¹⁰⁸⁶

We estimate that approximately 19% of funds will qualify for the limited derivatives user exception.¹⁰⁸⁷ We would expect some small funds to fall within the limited derivatives user exception.¹⁰⁸⁸ However, not all small funds that use derivatives will necessarily qualify as limited derivatives users. We estimate—applying to small funds the same estimated percentage of funds overall that will qualify as limited derivatives users—that approximately 19% of small funds (approximately 16 small funds) will qualify for the limited derivatives user exception under the final rule.¹⁰⁸⁹

d. Reverse Repurchase Agreements

Rule 18f-4 will permit a fund to engage in reverse repurchase agreements and other similar financing transactions so long as they either are subject to the relevant asset coverage requirements of section 18 for senior securities representing indebtedness, or treated as derivative transactions for all purposes under the rule.¹⁰⁹⁰ A fund's election will apply to all of its reverse repurchase agreements and similar financing transactions, and therefore all of a fund's such transactions will be subject to consistent treatment under the final rule.¹⁰⁹¹

Today, funds rely on the asset segregation approach that Release 10666 describes with respect to reverse repurchase agreements, which funds may view as separate from the limitations established on bank borrowings (and other senior securities that are evidence of indebtedness) by the asset coverage requirements of section 18. To the extent that funds elect to rely on the asset

¹⁰⁸⁶ See *supra* section II.E.

¹⁰⁸⁷ See *supra* paragraph following footnote 892 (estimating that 19% of funds, or 2,437 funds total, will qualify as limited derivatives users). This estimate excludes funds that will comply with the derivatives risk management program. See also *supra* sections II.F, III.C.1, III.C.3, III.C.5, IV.B.3, and V.D.1.a.

¹⁰⁸⁸ *Id.*

¹⁰⁸⁹ *Id.* We estimate that there are 86 small funds that meet the small entity definition. See *supra* footnote 1068 and accompanying text. 86 small funds x 19% = approximately 16 funds that are small entities that will qualify for the limited derivatives user exception.

¹⁰⁹⁰ See *supra* section II.H.

¹⁰⁹¹ Rule 18f-4(d)(1)(i) and (ii).

coverage requirements of section 18 with respect to their reverse repurchase agreements and similar financing transactions, these funds will have to take these transactions into account in monitoring their compliance with the asset coverage requirements of section 18. Alternatively, to the extent that a fund chooses to treat its reverse repurchase and other similar financing transaction activity as derivatives for all purposes of the final rule, the fund must adopt and implement policies and procedures reasonably designed to manage the fund's derivatives risks in order to qualify as a limited derivatives user (assuming that the fund's use of reverse repurchase agreements and similar financing transactions, in addition to its derivatives exposure, was limited to 10% of its net assets). If such a fund's use of reverse repurchase agreements and similar financing transactions, in addition to derivatives exposure associated with the fund's other derivatives transactions, exceeds 10% of its net assets, the fund must adopt a derivatives risk management program and comply with the VaR-based limit on fund leverage risk.

We estimate that about 0.27% of all funds, excluding BDCs, will enter into these transactions in amounts that exceed the asset coverage requirements.¹⁰⁹² If these funds choose not to adjust their use of reverse repurchase agreements, similar financing transactions, or borrowings in order to comply with the asset coverage requirements, these funds will have to qualify as a limited derivatives user under the final rule (and adopt the policies and procedures that the limited derivatives user exception requires) or else be subject to the final rule's VaR and program requirements. We similarly estimate—applying to small funds the same estimated percentage of funds that will engage in reverse repurchase agreements or similar financing activities—that no small funds will engage in these transactions in combined amounts that exceed the asset coverage requirement.¹⁰⁹³ We therefore do not estimate a cost burden to small funds associated with the provisions regarding reverse repurchase agreements in rule 18f-4.

¹⁰⁹² See *supra* footnote 1033.

¹⁰⁹³ We estimate that there are 86 small funds that meet the small entity definition. See *supra* footnote 1068 and accompanying text. $86 \text{ small funds} \times 0.27\% = 0$ (rounded for convenience).

e. Unfunded Commitment Agreements

The rule also addresses funds' participation in unfunded commitment agreements. The approach in the final rule recognizes that while entering into unfunded commitment agreements may raise the risk that a fund may be unable to meet its obligations under these transactions, unfunded commitments do not generally involve the leverage and other risks associated with derivatives transactions.¹⁰⁹⁴ Rule 18f-4 will permit a fund to enter into unfunded commitment agreements if it reasonably believes, at the time it enters into such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to each of its unfunded commitment agreements, in each case as they come due. The rule prescribes factors that a fund must consider in forming such a reasonable belief. If a fund enters into unfunded commitment agreements in compliance with this requirement, the rule specifies that unfunded commitment agreements will not be considered for purposes of computing asset coverage, as defined in section 18(h) of the Investment Company Act. This approach for unfunded commitment agreements reflects current industry practice, as discussed above.¹⁰⁹⁵ We therefore do not expect that this provision in rule 18f-4 will result in significant costs to small (or large) funds.

f. When-Issued, Forward-Settling, and Non-Standard Settlement Cycle Securities Transactions

In a change from the proposal, the final rule also includes a new provision that will permit funds, as well as money market funds, to invest in securities on a when-issued or forward-settling basis, or with a non-standard settlement cycle, and the transactions will be deemed not to involve a senior security subject to certain conditions.¹⁰⁹⁶ This provision will permit funds and money market funds, including smaller entities, to invest in securities on a when-issued basis under rule 18f-4 notwithstanding that these investments trade on a forward basis involving a temporary delay between the transaction's trade date and settlement date. We do not believe that this approach will result in a significant change in the extent to which funds and money market

¹⁰⁹⁴ See *supra* section II.I.

¹⁰⁹⁵ See *id.*

¹⁰⁹⁶ See *supra* section II.A.

funds engage in these transactions. We therefore do not expect these amendments to result in significant costs to small (or large) funds.

g. Recordkeeping

Rule 18f-4 includes certain recordkeeping provisions that are designed to provide the Commission, and the fund's board of directors and compliance personnel, the ability to evaluate the fund's compliance with the final rule's requirements.¹⁰⁹⁷

First, the rule will require a fund to maintain certain records documenting its derivatives risk management program, including a written record of: (1) its policies and procedures designed to manage the fund's derivatives risks, (2) the results of any stress testing of its portfolio, (3) the results of any VaR test backtesting it conducts, (4) records documenting any internal reporting or escalation of material risks under the program, and (5) records documenting any periodic reviews of the program.¹⁰⁹⁸

Second, the rule will also require a fund to maintain a written record of any materials provided to the fund's board of directors in connection with approving the designation of the derivatives risk manager. The rule also requires a fund to keep records of any written reports provided to the board of directors relating to the program, and any written reports provided to the board that the rule requires regarding the fund's non-compliance with the applicable VaR test.¹⁰⁹⁹

Third, a fund that is required to comply with the VaR test also has to maintain written records documenting the determination of: its portfolio VaR; the VaR of its designated reference portfolio, as applicable; its VaR ratio (the value of the VaR of the fund's portfolio divided by the VaR of the designated reference portfolio), as applicable; and any updates to the VaR calculation models used by the fund, as well as the basis for any material changes made to those models.¹¹⁰⁰

¹⁰⁹⁷ See *supra* section II.J.

¹⁰⁹⁸ Rule 18f-4(c)(6)(i)(A).

¹⁰⁹⁹ Rule 18f-4(c)(6)(i)(B).

¹¹⁰⁰ Rule 18f-4(c)(6)(i)(C).

Fourth, the rule requires a fund that is a limited derivatives user to maintain a written record of its policies and procedures that are reasonably designed to manage its derivatives risks.¹¹⁰¹

Fifth, a fund that enters into unfunded commitment agreements will be required to maintain a record documenting the basis for the fund's belief regarding the sufficiency of its cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements.¹¹⁰² A record must be made each time a fund enters into such an agreement.

Sixth, the rule requires a fund that enters into reverse repurchase agreements or similar financing transactions to maintain a record documenting whether it is complying with the asset coverage requirements of section 18 with respect to these transactions, or alternatively whether it is treating these transactions as derivatives transactions for all purposes under the rule.¹¹⁰³

Finally, funds must maintain the required records for a period of five years.¹¹⁰⁴

As reflected above, we estimate that the average annual recordkeeping costs for funds that will not qualify as limited derivatives users (that is, recordkeeping costs associated with the program and VaR requirements) will be \$10,613 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund.¹¹⁰⁵ We separately estimate that the average annual recordkeeping costs for a limited derivatives user will be \$1,917.50.¹¹⁰⁶

To the extent that we estimate that small funds will be subject to the various provisions of the rule that will necessitate recordkeeping requirements, as discussed above, these small funds

¹¹⁰¹ Rule 18f-4(c)(6)(i)(D).

¹¹⁰² Rule 18f-4(e)(2).

¹¹⁰³ Rule 18f-4(d)(2).

¹¹⁰⁴ Rule 18f-4(c)(6)(ii); rule 18f-4(d)(2); rule 18f-4(e)(2).

¹¹⁰⁵ *See supra* section IV.B.7. The components of this estimate include average annual estimates of \$10,013 internal cost and \$600 average annual external cost per fund (\$10,013 + \$600 = \$10,613). This section also discusses the professional skills that we believe compliance with this aspect of the rule will entail.

¹¹⁰⁶ *Id.* The components of this estimate include average annual estimates of \$1,317.50 internal cost and \$600 average annual external cost per fund (\$1,317.50 + \$600 = \$1,917.50).

also will be subject to the associated recordkeeping requirements. Therefore, we estimate that: 21% of small funds (approximately 18 small funds) will have to comply with the program-related recordkeeping requirements and requirements regarding materials provided to the fund's board; 21% of small funds (approximately 18 small funds) will have to comply with requirements to maintain records of compliance with the VaR test; and 19% of small funds (approximately 16 funds) will have to comply with the recordkeeping requirements for limited derivatives users.¹¹⁰⁷

In addition, we estimate that 1% of small funds (approximately 1 small fund) will use reverse repurchase agreements or similar financing agreements and be required to comply with the recordkeeping requirements associated with this aspect of the rule.¹¹⁰⁸ We further estimate that the average annual recordkeeping cost for each fund—large or small—that chooses to enter into reverse repurchase agreements or similar financing transactions is \$790.50 to document how the fund elects treat these transactions for all purposes under the rule (*i.e.*, either subject to section 18's asset coverage requirements, or treated as derivatives transactions).¹¹⁰⁹

Finally, we estimate that 10% of small funds, or 9 small funds, will enter into at least one unfunded commitment agreement annually, thus triggering the requisite recordkeeping requirements.¹¹¹⁰ We also estimate an average annual cost of \$1,317.50 for a fund to create and maintain a record documenting its "reasonable belief" regarding its ability to meet its obligations with respect to each unfunded commitment agreement, each time it enters such an agreement.¹¹¹¹

¹¹⁰⁷ See *supra* sections III.C.1, III.C.2, III.C.3, V.D.1.a, V.D.1.b, and V.D.1.c.

¹¹⁰⁸ We estimate that 1% of all funds subject to the final rule (excluding BDCs), will enter into such transactions. See *supra* footnote 1033. Applying the same percentage, we estimate that 1 small fund will use reverse repurchase agreements or similar financing transactions ((86 small funds – 12 small BDCs) = 74 small funds x 1% = 1 (rounded for convenience)).

¹¹⁰⁹ See *supra* section IV.B.7.

¹¹¹⁰ We believe the final rule's approach to unfunded commitments is generally consistent with the current practices of funds that enter into unfunded commitments. See *supra* section II.I. Based on our staff's review of fund filings, we estimate that 1,339 funds (approximately 10% of all funds subject to the rule) entered into an unfunded commitment agreement as of December 2019, see *supra* footnote 1033, and 9 small funds (10% of 86 small funds) did likewise.

¹¹¹¹ See *supra* section IV.B.7.

A fund's recordkeeping-related costs will vary, depending on the provisions of rule 18f-4 that the fund relies on. For example, funds that are required to adopt derivatives risk management programs, versus funds that are limited derivatives users under the rule, will be subject to different recordkeeping requirements. However, while small funds' recordkeeping burdens will vary based on the provisions of the rule that a fund relies on, their recordkeeping burdens will not vary solely because they are small funds. We do not anticipate that larger funds, or funds that are part of a large fund complex, will experience any significant economies of scale related to the final rule's additional recordkeeping requirements.

2. Amendments to Forms N-PORT, N-RN, and N-CEN

a. Amendments to Form N-PORT

The amendments to Form N-PORT will require limited derivatives users to report information about their derivatives exposure, and also—as applicable for funds that are subject to the rule 18f-4 VaR-based limit on fund leverage risk—to report certain VaR-related information.¹¹¹² These amendments will help the Commission assess compliance with rule 18f-4.

Under the final rule, limited derivatives users that file Form N-PORT will have to provide information regarding their derivatives exposure on this form, specifically: (1) the fund's aggregate derivatives exposure; and (2) the fund's derivatives exposure attributable to currency or interest rate derivatives entered into and maintained by the fund for hedging purposes. In addition, if a limited derivatives user has derivatives exposure exceeding 10% of the fund's net assets, and this exceedance persists beyond the five-business-day period that the final rule provides for remediation, the fund will have to report the number of business days beyond the five-business-day remediation period that its derivatives exposure exceeded 10% of net assets. We estimate that 19% of small funds that file Form N-PORT (approximately 14 small funds) are limited derivatives users that will report information in response to this new exposure-related

¹¹¹² See *supra* section II.G.1; see also Items B.9 and B.10 of Form N-PORT.

disclosure requirement.¹¹¹³ In addition, funds that are subject to the limit on fund leverage risk will have to report certain VaR-related information for the reporting period. We estimate that 21% of small funds (approximately 16 small funds) will be subject to these VaR-related disclosure requirements.¹¹¹⁴

We estimate that each fund that reports information in response to the VaR-related disclosure requirements on Form N-PORT will incur an average cost of \$3,951 per year.¹¹¹⁵ We also estimate that limited derivatives users reporting information in response to the requirement to report derivatives exposure, including the number of business days its derivatives exposure exceeds 10% of net assets, will incur a cost of \$3,958 per year.¹¹¹⁶ Notwithstanding the economies of scale experienced by large versus small funds, we would not expect the costs of

¹¹¹³ See *supra* sections V.C, V.D.1.a, and V.D.1.c. Because BDCs do not file reports on Form N-PORT, we deducted BDCs from our estimate of small Form N-PORT filers (86 small funds – 12 small BDCs = 74 small funds that file reports on Form N-PORT). See *supra* footnote 1068 and accompanying text.

We estimate that approximately 19% of funds will qualify for the limited derivatives user exception. See *supra* footnote 1087 and accompanying text. Although this estimated percentage includes BDCs, because the total number of BDCs relative to the number of registered open- and closed-end funds is small, so we did not adjust our estimated percentage to reflect the fact that BDCs do not file Forms N-PORT. See *supra* section III.B.1. Therefore, we estimate the total number of small funds subject to this Form N-PORT requirement as follows: 74 small funds that file reports on Form N-PORT x 19% = approximately 14 small funds.

¹¹¹⁴ We estimate that 74 small funds file reports on Form N-PORT. See *supra* footnote 1113. We estimate that approximately 21% of funds will be subject to the proposed limit on fund leverage risk. See *supra* section III.C.2. Although this estimated percentage includes BDCs, we note that the total number of BDCs relative to the number of registered open- and closed-end funds is small, and therefore our estimate does not adjust this percentage to reflect the fact that BDCs do not file Form N-PORT. See *supra* section III.B.1. Therefore, we estimate the total number of small funds that will make VaR-related disclosures on Form N-PORT as follows: 74 small funds that file reports on Form N-PORT x 21% = approximately 16 small funds.

Under the final rule, funds that choose not to adjust their use of reverse repurchase agreements, similar financing transactions, or borrowings to comply with section 18's asset coverage requirements must treat such transactions as derivatives and either qualify as a limited derivatives user or be subject to the VaR tests and program requirements. We do not estimate any small funds will use these transactions in combined amounts that exceed the asset coverage requirement, and accordingly do not expect this requirement to substantively affect our estimate regarding the number of smaller funds that are likely to report VaR-related information on Form N-PORT.

¹¹¹⁵ See *supra* section IV.D. The components of this \$3,951 estimate include average annual estimates of \$3,039 internal cost and \$912 average annual external cost per fund (\$3,039 + \$912 = \$3,951).

¹¹¹⁶ See *supra* section IV.D. The components of this \$3,958 estimate include average annual estimates of \$3,039 internal cost (to report exposure information), \$7.02 internal cost (to report exceedance-related information), and \$912 average annual external cost per fund (\$3,039 + \$7.02 + \$912 = approximately \$3,958).

compliance associated with the new Form N-PORT requirements to be meaningfully different for small versus large funds. The costs of compliance will vary only based on fund characteristics tied to their derivatives use. For example, a limited derivatives user that uses derivatives more extensively (while still under the 10% threshold) will incur more costs to calculate its derivatives exposure than a limited derivatives user that uses derivatives to a more limited degree. And a fund that is a limited derivatives user, or that otherwise is not subject to the VaR test, will not incur any costs to comply with the new VaR-related N-PORT items. Similarly, a fund that is a limited derivatives user will report derivatives exposure, but if it does not exceed the 10% threshold, will not incur costs to report exceedances.

b. Amendments to Current Reporting Requirements

We are re-titling Form N-LIQUID as Form N-RN, and amending this form to include new reporting events for funds that are subject to rule 18f-4's limit on fund leverage risk.¹¹¹⁷ We are adopting these amendments in light of final rule 18f-4's requirement for funds to file current reports on Form N-RN about VaR test breaches under certain circumstances, as well as conforming amendments to rule 30b1-10.¹¹¹⁸ These current reporting requirements are designed to aid the Commission in assessing funds' compliance with the VaR tests. We are requiring funds to provide this information in a current report because we believe that the Commission should be notified promptly when a fund is out of compliance with the VaR-based limit on fund leverage risk (and also when it has come back into compliance with its applicable VaR test). We believe this information could indicate that a fund is experiencing heightened risks as a result of a fund's use of derivatives transactions, as well as provide the Commission insight about the duration and severity of those risks, and whether those heightened risks are fund-specific or industry-wide.

¹¹¹⁷ See *supra* section II.G.3.

¹¹¹⁸ See rule 18f-4(c)(7); see also rule 30b1-10.

We estimate that each report that a fund will file in response to the new VaR-related reporting requirements of Form N-RN will entail costs of approximately \$1,438.¹¹¹⁹ Furthermore, because each report that a fund files initially reporting a VaR test breach must be accompanied by a second report when the fund comes back into compliance with the VaR test, each VaR test breach that requires a report will entail costs of two times the estimated cost for filing a single report ($\$1,438 \times 2 = \$2,876$). We estimate that approximately 18 small funds will be required to comply with the limit on fund leverage risk and may report VaR test related information on Form N-RN.¹¹²⁰ However, we also estimate that only 1% of funds that must comply with the leverage limit will file Form N-RN each year because they breached the relative or absolute VaR test, and applying the same percentage, estimate that that no small fund will file the form.¹¹²¹ Regardless, because the amendments to Form N-RN will require both large and small funds to report VaR test breaches, the burden to report is not associated with fund size, and consequently, we would not expect the costs of compliance with the new Form N-RN requirements to be meaningfully different for small versus large funds.

c. Amendments to Form N-CEN

The amendments to Form N-CEN will require a fund to identify whether it relied on rule 18f-4 during the reporting period.¹¹²² The amendments also require a fund to identify whether it relied on any of the exemptions from various requirements under the rule, specifically whether it: (1) is a limited derivatives user; (2) is a leveraged/inverse fund as defined in the rule that is excepted from the requirement to comply with the VaR-based limit on fund leverage risk; (3) has entered into reverse repurchase agreements or similar financing transactions in reliance either on

¹¹¹⁹ See *supra* section IV.E. The components of this \$1,438 estimate include 3 hours of compliance attorney time (\$368) and 1 hour of senior programmer time (\$334) ($(3 \times \$368 = \$1,104) + (1 \times \$334 = \$334) = \$1,438$).

¹¹²⁰ See *supra* footnote 1079 and accompanying text (estimating that 21% of small funds, or 18 small funds, will be subject to a VaR-based limit on fund leverage risk). We therefore similarly estimate that the same percentage and number of small funds may be required to report VaR-related information on Form N-RN.

¹¹²¹ See *supra* section IV.E. Calculated as follows: 18 small funds subject to the VaR-based limit $\times 1\% = 0$ (rounded for convenience).

¹¹²² See *supra* section II.G.3; see also Item C.7.n of Form N-CEN.

the rule provision that requires compliance with section 18's asset coverage requirements, or the provision that treats such transactions as derivative transactions under the final rule; (4) has entered into unfunded commitment agreements; or (5) has invested in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle.¹¹²³ The amendments to Form N-CEN are designed to assist the Commission with its oversight functions by allowing it to identify which funds were excepted from, or relied on, certain of the rule's provisions.

We estimate that each fund subject to the new Form N-CEN reporting requirements will incur additional paperwork-related burdens associated with responding to the new form items that average \$140.40 per year on a per-fund basis.¹¹²⁴ We estimate that approximately 31 registered open- and closed-end funds are small entities that will be subject to the new Form N-CEN reporting requirements.¹¹²⁵ Notwithstanding any economies of scale experienced by large versus small funds, we do not expect the costs of compliance with the new Form N-CEN requirements to be meaningfully different for small versus large funds.

3. Amendments to Rule 6c-11

We are amending the provision in rule 6c-11 excluding leveraged/inverse ETFs from the scope of that rule so that a leveraged/inverse ETF may rely on that rule if the fund complies with

¹¹²³ See Item C.7.n.i-vi of Form N-CEN; *see also* rule 18f-4(c)(4); (c)(5); (d)(i); (d)(ii); (e); and (f).

¹¹²⁴ See *supra* section IV.F.

¹¹²⁵ Because BDCs do not file reports on Form N-CEN, we deduct the number of BDCs from the total number of small funds that we estimate (86 small funds – 12 BDCs that are small entities = 74 small funds that file reports on Form N-CEN). See *supra* footnote 1068 and accompanying text.

The estimate of 31 funds is based on the percentage of funds we believe will be subject to the derivatives risk management program requirement (21% of funds, *see supra* footnote 849 and accompanying text, which encompasses the percentage of funds that we estimate will be subject to the VaR test requirements) plus the percentage of funds we believe will qualify as limited derivatives users (19% of funds, *see supra* footnote 1087 and accompanying text). We assume generally that funds that will enter into reverse repurchase agreements or similar financing transactions, and unfunded commitments either would have to comply with the derivatives risk management program or would qualify as a limited derivatives user. See *supra* footnote 1033. In addition, we include money market funds in this estimate, as they may report their reliance on rule 18f-4's provisions for when-issued and forward-settling transactions on Form N-CEN.

We therefore estimate that approximately 30 small funds that file reports on Form N-CEN ((86 total small funds less 12 small BDCs = 74 small funds) x 40% (21% + 19%) = approximately 30 small funds) + 1 small money market fund = 31 small funds subject to the new Form N-CEN reporting requirements.

the applicable requirements of rule 18f-4.¹¹²⁶ Rule 6c-11 permits ETFs that satisfy certain conditions to operate without obtaining an exemptive order from the Commission.¹¹²⁷ The rule is designed to create a consistent, transparent, and efficient regulatory framework for such ETFs and facilitate greater competition and innovation among ETFs. As a consequence of our amendment to rule 6c-11, and our rescission of the exemptive orders we previously issued to leveraged/inverse ETFs, the amendment to rule 6c-11 will newly permit leveraged/inverse ETFs to come within scope of the rule's exemptive relief. As a result, fund sponsors will be allowed to operate a leveraged/inverse ETF subject to the conditions in rules 6c-11 and 18f-4 without obtaining an exemptive order.

Currently, there are 172 leveraged/inverse ETFs.¹¹²⁸ As a result of the amendments, we expect the number of funds relying on rule 6c-11 to increase, and all 172 leveraged/inverse ETFs will rely on rule 6c-11. However, Commission staff estimates that none of these leveraged/inverse ETFs is a small entity.¹¹²⁹ In addition, we do not estimate our amendments to rule 6c-11 will change the estimated per-fund cost burden associated with rule 6c-11. The costs associated with complying with rule 6c-11 are discussed in the ETFs Adopting Release.¹¹³⁰

E. Agency Action to Minimize Effect on Small Entities

The RFA directs the Commission to consider significant alternatives that would accomplish our stated objectives, while minimizing any significant economic impact on small entities. We considered the following alternatives for small entities in relation to the adopted regulations: (1) exempting funds that are small entities from the reporting, recordkeeping, and other compliance requirements, to account for resources available to small entities; (2) establishing different reporting, recordkeeping, and other compliance requirements or frequency, to account for resources available to small entities; (3) consolidating or simplifying the

¹¹²⁶ See *supra* section II.F.6.

¹¹²⁷ *Id.*

¹¹²⁸ See *supra* footnote 820 and accompanying paragraph.

¹¹²⁹ *Id.*

¹¹³⁰ See ETFs Adopting Release, *supra* footnote 76, at sections IV-VI.

compliance requirements under the proposal for small entities; and (4) using performance rather than design standards.

1. Alternative Approaches to Rule 18f-4

We do not believe that exempting small funds from the provisions in rule 18f-4 would permit us to achieve our stated objectives. Because rule 18f-4 is an exemptive rule, it will require funds to comply with new requirements only if they wish to enter into derivatives or certain other transactions.¹¹³¹ Therefore, if a small entity does not enter into derivatives or such other transactions as part of its investment strategy, then the small entity will not be subject to the provisions of rule 18f-4. In addition, a small fund whose derivatives use is limited could benefit from the limited derivatives user exception because it will not be required to adopt a derivatives risk management program (including all of the program elements). Although smaller funds that are limited derivatives users will still have to adopt policies and procedures that are reasonably designed to manage their derivatives risks, the estimated costs associated with this requirement are expected to be significantly lower than the cost of adopting a full derivatives risk management program.¹¹³² Thus, we estimate that small funds that rely on the exception will not have to incur a significant portion of the costs associated with new rule 18f-4.

We estimate that 60% of all funds do not have any exposure to derivatives or such other transactions.¹¹³³ This estimate indicates that many funds, including many small funds, will be unaffected by the final rule. However, for small funds that are affected by our rule, providing an exemption for them could subject investors in small funds that engage in derivatives transactions (or other transactions that the rule covers) to a higher degree of risk than investors to large funds that will be required to comply with the elements of the rule.

¹¹³¹ See *supra* sections II.A and III.E.

¹¹³² See *supra* sections III.C.1 and IV.B.1 (Derivatives Risk Management Program) and III.C.3 and IV.B.6 (Requirements for Limited Derivatives Users) for a discussion of estimated costs associated with these elements of the rule.

¹¹³³ See *supra* footnote 807 and accompanying paragraph.

The undue speculation concern expressed in section 1(b)(7) of the Investment Company Act, and the asset sufficiency concern reflected in section 1(b)(8) of the Act—both of which the rule is designed to address—apply to both small as well as large funds. As discussed throughout this release, we believe that the rule will result in investor protection benefits, and these benefits should apply to investors in smaller funds as well as investors in larger funds. We therefore do not believe it would be appropriate to exempt small funds from the rule’s program requirement or VaR-based limit on fund leverage risk, or to establish different requirements applicable to funds of different sizes under these provisions to account for resources available to small entities. We believe that all of the elements of rule 18f-4 should work together to produce the anticipated investor protection benefits, and therefore do not believe it is appropriate to except smaller funds because we believe this would limit the benefits to investors in such funds.

We also do not believe that it would be appropriate to subject small funds to different reporting, recordkeeping, and other compliance requirements or frequency. Similar to the concerns discussed above, if the rule included different requirements for small funds, it could raise investor protection concerns for investors in small funds, including subjecting small fund investors to a higher degree of risk. We also believe that all fund investors will benefit from enhanced Commission monitoring and oversight of the fund industry, which we anticipate will result from the disclosure and reporting requirements.

We do not believe that consolidating or simplifying the compliance requirements under the rule for small funds would permit us to achieve our stated objectives. Again, this approach would raise investor protection concerns for investors in small funds using derivatives and the other transactions that the final rule addresses.¹¹³⁴ However, as discussed above, the rule contains an exception for limited derivatives users that we anticipate will subject funds that qualify for this exception to fewer compliance burdens. We recognize that the risks and potential impact of derivatives transactions on a fund’s portfolio generally increase as the fund’s level of derivatives

¹¹³⁴ See, e.g., rules 18f-4(d) (reverse repurchase agreements and similar financing transactions); (e) (unfunded commitments); and (f) (when-issued, forward-settling, and non-standard settlement cycle securities).

usage increases and when funds use derivatives for speculative purposes. Therefore the rule will entail a less significant compliance burden for funds—including small funds—that choose to limit their derivatives usage in the manner that the exception specifies. The final rule, therefore, includes provisions designed to consider the requirement burdens based on the fund’s use of derivatives (rather than the size of the fund).

The costs associated with rule 18f-4 will vary depending on the fund’s particular circumstances, and thus the rule could result in different burdens on funds’ resources. In particular, we expect that a fund that pursues an investment strategy that involves greater derivatives risk may have greater costs associated with its derivatives risk management program. For example, a fund that qualifies as a limited derivatives user under the rule will be exempt from the requirements to adopt and implement a derivatives risk management program, to adhere to the rule’s VaR-based limit on fund leverage risk, and to comply with related board oversight and reporting provisions. The costs of compliance with the rule will vary even for limited derivatives users, as these funds will be required to adopt policies and procedures that are “reasonably designed” to manage their derivatives risks. Thus, to the extent a fund that is a small entity faces relatively little derivatives risk, we believe it will incur relatively low costs to comply with the rule. However, we believe that it is appropriate to correlate the costs associated with the rule with the level of derivatives risk facing a fund, and not necessarily with the fund’s size in light of our investor protection objectives.

Finally, with respect to the use of performance rather than design standards, the rule generally uses performance standards for all funds relying on the rule, regardless of size. We believe that providing funds with the flexibility with respect to investment strategies and use of derivatives transactions is appropriate, as well as the derivatives risk management program design. However, the rule also uses design standards with respect to certain requirements such as complying with the VaR-based limit on fund leverage risk and the specified program elements in the derivatives risk management program. For the reasons discussed above, we believe that this use of design standards is appropriate to address investor protection concerns, particularly the

concerns expressed in sections 1(b)(7), 1(b)(8), and 18 of the Investment Company Act.

2. Alternative Approaches to Amendments to Forms N-PORT, N-LIQUID (N-RN), and N-CEN

We do not believe that the interests of investors would be served by exempting funds that are small entities from the reporting requirements. We believe that the form amendments are necessary to help identify and provide the Commission timely information about funds that comply with rule 18f-4.¹¹³⁵ Exempting small funds from coverage under all or any part of the form amendments could compromise the effectiveness of the reporting requirements, which the Commission believes would not be consistent with its goals of industry oversight and investor protection. We believe that fund investors will benefit from enhanced Commission monitoring and oversight of the fund industry, which we anticipate will result from the new reporting requirements.

For similar reasons, although we considered establishing different reporting requirements for small funds, we believe this would subject investors in small funds that enter into derivatives transactions to a higher degree of risk and information asymmetry than investors to large funds that will be required to comply with the new reporting requirements for which the reported information will be publicly available. We also note that registered open- and closed-end management investment companies, including those that are small entities, have already updated their systems and have established internal processes to prepare, validate, and file reports on Forms N-PORT and N-CEN.¹¹³⁶ For funds that will be required to file reports on Form N-RN pursuant to rules 18f-4 and 30b1-10, the vast majority of them are open-end funds, which already are required to submit the form upon specified events. With respect to the additional registered closed-end funds and BDCs newly required to file reports on Form N-RN, we do not believe they will need more time than other types of funds to comply with the new reporting

¹¹³⁵ See *supra* section III.C.9.

¹¹³⁶ See *supra* footnote 625 (noting that the funds that will rely on rule 18f-4, other than BDCs, generally are subject to reporting requirements of Forms N-PORT and N-CEN); see also Reporting Modernization Adopting Release, Release No. 32936 (Dec. 8, 2017) [82 FR 58731 (Dec. 14, 2017)] (requiring larger registered fund groups to submit reports on Form N-PORT by April 30, 2019, and smaller fund groups to submit reports on Form N-PORT by April 30, 2020).

requirements, given the limited set of reporting requirements they will be subject to and the relatively low burden we estimate of filing reports on Form N-RN.

We also do not believe that the interests of investors would be served by consolidating or simplifying the reporting requirements under the final rule for small funds. Small funds are as vulnerable to the same potential risks associated with their derivatives use as larger funds are, and therefore we believe that simplifying or consolidating the reporting requirements for small funds would not allow us to meet our stated objectives. Moreover, we believe many of the reporting requirements involve minimal burden. For example, the Form N-CEN “checking a box” reporting requirement is completed on an annual basis.

Finally, we did not prescribe performance standards rather than design standards for small funds because we believe this too could diminish the ability of the new rules to achieve their intended regulatory purpose by creating inconsistent reporting requirements between small and large funds, and weakening the benefits of the reporting requirement for investors in small funds.

3. Alternative Approaches to Rule 6c-11

Rule 6c-11 is designed to modernize the regulatory framework for ETFs and to create a consistent, transparent, and efficient regulatory framework.¹¹³⁷ The Commission’s full Regulatory Flexibility Act Analysis regarding rule 6c-11, including analysis of significant alternatives, appears in the 2019 ETFs Adopting Release.¹¹³⁸ This analysis of alternatives for small leveraged/inverse ETFs here is consistent with the Commission’s analysis of alternatives for small ETFs in that release.

We do not believe that permitting or requiring different treatment for any subset of leveraged/inverse ETFs, including small leveraged/inverse ETFs, under the amendments to rule 6c-11, and the rule’s related recordkeeping, disclosure and reporting requirements, will permit us to achieve our stated objectives. Similarly, we do not believe that we can establish simplified or

¹¹³⁷ See ETFs Adopting Release, *supra* footnote 76, at section I.

¹¹³⁸ See *id.* at section VI.

consolidated compliance requirements for small leveraged/inverse ETFs under the amendments to rule 6c-11 without compromising our objectives. The Commission discussed the bases for this determination (with respect to ETFs other than leveraged/inverse ETFs) in more detail in the ETFs Adopting Release, and we are extending that analysis to leveraged/inverse ETFs in this FRFA.

VI. STATUTORY AUTHORITY

The Commission is adopting new rule 18f-4 under the authority set forth in sections 6(c), 12(a), 18, 31(a), 38(a), and 61 of the Investment Company Act of 1940 [15 U.S.C. 80a-6(c), 80a-12(a), 80a-18, 80a-30(a), 80a-37(a), and 80a-60]. The Commission is adopting amendments to rule 6c-11 under the authority set forth in sections 6(c), 22(c), and 38(a) of the Investment Company Act [15 U.S.C. 80a-6(c), 22(c), and 80a-37(a)]. The Commission is adopting amendments to rule 22e-4 under the authority set forth in 22(c), 22(e), 34(b) and 38(a) of the Investment Company Act [15 U.S.C. 80a-22(c), 80a-22(e), 80a-35(b), and 80a-37(a)], the Investment Advisers Act, particularly, section 206(4) thereof [15 U.S.C. 80b-6(4)], the Exchange Act, particularly section 10(b) thereof [15 U.S.C. 78a *et seq.*], the Securities Act, particularly section 17(a) thereof [15 U.S.C. 77a *et seq.*]. The Commission is adopting amendments to rule 30b1-10 under the authority set forth in sections 22(c), 22(e), 34(b) and 38(a) of the Investment Company Act [15 U.S.C. 80a-22(c), 80a-22(e), 80a-35(b), and 80a-37(a)], the Investment Advisers Act, particularly, section 206(4) thereof [15 U.S.C. 80b-6(4)], the Exchange Act, particularly section 10(b) thereof [15 U.S.C. 78a *et seq.*], the Securities Act, particularly section 17(a) thereof [15 U.S.C. 77a *et seq.*]. The Commission is adopting amendments to Form N-PORT, Form N-LIQUID (re-titled “Form N-RN”), Form N-CEN, and Form N-2 under the authority set forth in sections 6(c), 8, 18, 30, and 38 of the Investment Company Act of 1940 [15 U.S.C. 80a-8, 80a-18, 80a-29, 80a-37, 80a-63], sections 6, 7(a), 10 and 19(a) of the Securities

Act of 1933 [15 U.S.C. 77f, 77g(a), 77j, 77s(a)], and sections 10, 13, 15, 23, and 35A of the Exchange Act [15 U.S.C. 78j, 78m, 78o, 78w, and 78ll].

List of Subjects

17 CFR Part 239

Reporting and recordkeeping requirements, Securities.

17 CFR Part 249

Brokers, Fraud, Reporting and recordkeeping requirements, Securities.

17 CFR Parts 270 and 274

Investment companies, Reporting and recordkeeping requirements, Securities.

TEXT OF RULES AND FORM AMENDMENTS

For the reasons set out in the preamble the Commission amends title 17, chapter II of the Code of Federal Regulations as follows:

PART 239—FORMS PRESCRIBED UNDER THE SECURITIES ACT OF 1933

1. The authority citation for part 239 continues to read, in part, as follows:

Authority: 15 U.S.C. 77c, 77f, 77g, 77h, 77j, 77s, 77z-2, 77z-3, 77sss, 78c, 78l, 78m, 78n, 78o(d), 78o-7 note, 78u-5, 78w(a), 78ll, 78mm, 80a-2(a), 80a-3, 80a-8, 80a-9, 80a-10, 80a-13, 80a-24, 80a-26, 80a-29, 80a-30, and 80a-37; and sec. 107, Pub. L. 112-106, 126 Stat. 312, unless otherwise noted.

* * * * *

PART 249—FORMS, SECURITIES EXCHANGE ACT OF 1934

2. The authority citation for part 249 continues to read, in part, as follows:

Authority: 15 U.S.C. 78a *et seq.* and 7201 *et seq.*; 12 U.S.C. 5461 *et seq.*; 18 U.S.C. 1350; Sec. 953(b), Pub. L. 111-203, 124 Stat. 1904; Sec. 102(a)(3), Pub. L. 112-106, 126 Stat. 309 (2012); Sec. 107, Pub. L. 112-106, 126 Stat. 313 (2012), and Sec. 72001, Pub. L. 114-94, 129 Stat. 1312 (2015), unless otherwise noted.

* * * * *

PART 270—RULES AND REGULATIONS, INVESTMENT COMPANY ACT OF 1940

3. The authority citation for part 270 continues to read, in part, as follows:

Authority: 15 U.S.C. 80a-1 *et seq.*, 80a-34(d), 80a-37, 80a-39, and Pub. L. 111-203, sec. 939A, 124 Stat. 1376 (2010), unless otherwise noted.

* * * * *

Section 270.6c-11 is also issued under 15 U.S.C. 80a-6(c) and 80a-37(a).

* * * * *

4. Amend § 270.6c-11 by revising paragraph (c)(4) to read as follows.

§ 270.6c-11 Exchange traded-funds.

* * * * *

(c) * * *

(4) An exchange-traded fund that seeks, directly or indirectly, to provide investment returns that correspond to the performance of a market index by a specified multiple, or to provide investment returns that have an inverse relationship to the performance of a market index, over a predetermined period of time, must comply with all applicable provisions of § 270.18f-4.

* * * * *

5. Section 270.18f-4 is added to read as follows:

§ 270.18f-4 Exemption from the requirements of section 18 and section 61 for certain senior securities transactions.

(a) *Definitions.* For purposes of this section:

Absolute VaR test means that the VaR of the fund's portfolio does not exceed 20% of the value of the fund's net assets, or in the case of a closed-end company that has issued to investors and has then outstanding shares of a class of senior security that is a stock, that the VaR of the fund's portfolio does not exceed 25% of the value of the fund's net assets.

Derivatives exposure means the sum of the gross notional amounts of the fund's derivatives transactions described in paragraph (1) of the definition of the term "derivatives

transaction” of this section, and in the case of short sale borrowings, the value of the assets sold short. If a fund’s derivatives transactions include reverse repurchase agreements or similar financing transactions under paragraph (d)(1)(ii) of this section, the fund’s derivatives exposure also includes, for each transaction, the proceeds received but not yet repaid or returned, or for which the associated liability has not been extinguished, in connection with the transaction. In determining derivatives exposure a fund may convert the notional amount of interest rate derivatives to 10-year bond equivalents and delta adjust the notional amounts of options contracts and exclude any closed-out positions, if those positions were closed out with the same counterparty and result in no credit or market exposure to the fund.

Derivatives risk manager means an officer or officers of the fund’s investment adviser responsible for administering the program and policies and procedures required by paragraph (c)(1) of this section, provided that the derivatives risk manager:

(1) May not be a portfolio manager of the fund, or if multiple officers serve as derivatives risk manager, may not have a majority composed of portfolio managers of the fund; and

(2) Must have relevant experience regarding the management of derivatives risk.

Derivatives risks means the risks associated with a fund’s derivatives transactions or its use of derivatives transactions, including leverage, market, counterparty, liquidity, operational, and legal risks and any other risks the derivatives risk manager (or, in the case of a fund that is a limited derivatives user as described in paragraph (c)(4) of this section, the fund’s investment adviser) deems material.

Derivatives transaction means:

(1) Any swap, security-based swap, futures contract, forward contract, option, any combination of the foregoing, or any similar instrument (“derivatives instrument”), under which a fund is or may be required to make any payment or delivery of cash or other assets during the life of the instrument or at maturity or early termination, whether as margin or settlement payment or otherwise;

- (2) Any short sale borrowing; and
- (3) If a fund relies on paragraph (d)(1)(ii) of this section, any reverse repurchase agreement or similar financing transaction.

Designated index means an unleveraged index that is approved by the derivatives risk manager for purposes of the relative VaR test and that reflects the markets or asset classes in which the fund invests and is not administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used. In the case of a blended index, none of the indexes that compose the blended index may be administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used.

Designated reference portfolio means a designated index or the fund's securities portfolio. Notwithstanding paragraph (2) of the definition of *designated index* of this section, if the fund's investment objective is to track the performance (including a leverage multiple or inverse multiple) of an unleveraged index, the fund must use that index as its designated reference portfolio.

Fund means a registered open-end or closed-end company or a business development company, including any separate series thereof, but does not include a registered open-end company that is regulated as a money market fund under § 270.2a-7.

Leveraged/inverse fund means a fund that seeks, directly or indirectly, to provide investment returns that correspond to the performance of a market index by a specified multiple ("leverage multiple"), or to provide investment returns that have an inverse relationship to the performance of a market index ("inverse multiple"), over a predetermined period of time.

Relative VaR test means that the VaR of the fund's portfolio does not exceed 200% of the VaR of the designated reference portfolio, or in the case of a closed-end company that has issued to investors and has then outstanding shares of a class of senior security that is a stock, that the

VaR of the fund's portfolio does not exceed 250% of the VaR of the designated reference portfolio.

Securities portfolio means the fund's portfolio of securities and other investments, excluding any derivatives transactions, that is approved by the derivatives risk manager for purposes of the relative VaR test, provided that the fund's securities portfolio reflects the markets or asset classes in which the fund invests (*i.e.*, the markets or asset classes in which the fund invests directly through securities and other investments and indirectly through derivatives transactions).

Unfunded commitment agreement means a contract that is not a derivatives transaction, under which a fund commits, conditionally or unconditionally, to make a loan to a company or to invest equity in a company in the future, including by making a capital commitment to a private fund that can be drawn at the discretion of the fund's general partner.

Value-at-risk or *VaR* means an estimate of potential losses on an instrument or portfolio, expressed as a percentage of the value of the portfolio's assets (or net assets when computing a fund's VaR), over a specified time horizon and at a given confidence level, provided that any VaR model used by a fund for purposes of determining the fund's compliance with the relative VaR test or the absolute VaR test must:

(1) Take into account and incorporate all significant, identifiable market risk factors associated with a fund's investments, including, as applicable:

(i) Equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk;

(ii) Material risks arising from the nonlinear price characteristics of a fund's investments, including options and positions with embedded optionality; and

(iii) The sensitivity of the market value of the fund's investments to changes in volatility;

(2) Use a 99% confidence level and a time horizon of 20 trading days; and

(3) Be based on at least three years of historical market data.

(b) *Derivatives transactions.* If a fund satisfies the conditions of paragraph (c) of this section, the fund may enter into derivatives transactions, notwithstanding the requirements of sections 18(a)(1), 18(c), 18(f)(1), and 61 of the Investment Company Act (15 U.S.C. 80a-18(a)(1), 80a-18(c), 80a-18(f)(1), and 80a-60), and derivatives transactions entered into by the fund in compliance with this section will not be considered for purposes of computing asset coverage, as defined in section 18(h) of the Investment Company Act (15 U.S.C. 80a-18(h)).

(c) *Conditions—*(1) *Derivatives risk management program.* The fund adopts and implements a written derivatives risk management program (“program”), which must include policies and procedures that are reasonably designed to manage the fund’s derivatives risks and to reasonably segregate the functions associated with the program from the portfolio management of the fund. The program must include the following elements:

(i) *Risk identification and assessment.* The program must provide for the identification and assessment of the fund’s derivatives risks. This assessment must take into account the fund’s derivatives transactions and other investments.

(ii) *Risk guidelines.* The program must provide for the establishment, maintenance, and enforcement of investment, risk management, or related guidelines that provide for quantitative or otherwise measurable criteria, metrics, or thresholds of the fund’s derivatives risks. These guidelines must specify levels of the given criterion, metric, or threshold that the fund does not normally expect to exceed, and measures to be taken if they are exceeded.

(iii) *Stress testing.* The program must provide for stress testing to evaluate potential losses to the fund’s portfolio in response to extreme but plausible market changes or changes in market risk factors that would have a significant adverse effect on the fund’s portfolio, taking into account correlations of market risk factors and resulting payments to derivatives counterparties. The frequency with which the stress testing under this paragraph is conducted must take into account the fund’s strategy and investments and current market conditions, provided that these stress tests must be conducted no less frequently than weekly.

(iv) *Backtesting.* The program must provide for backtesting to be conducted no less frequently than weekly, of the results of the VaR calculation model used by the fund in connection with the relative VaR test or the absolute VaR test by comparing the fund's gain or loss that occurred on each business day during the backtesting period with the corresponding VaR calculation for that day, estimated over a one-trading day time horizon, and identifying as an exception any instance in which the fund experiences a loss exceeding the corresponding VaR calculation's estimated loss.

(v) *Internal reporting and escalation—(A) Internal reporting.* The program must identify the circumstances under which persons responsible for portfolio management will be informed regarding the operation of the program, including exceedances of the guidelines specified in paragraph (c)(1)(ii) of this section and the results of the stress tests specified in paragraph (c)(1)(iii) of this section.

(B) *Escalation of material risks.* The derivatives risk manager must inform in a timely manner persons responsible for portfolio management of the fund, and also directly inform the fund's board of directors as appropriate, of material risks arising from the fund's derivatives transactions, including risks identified by the fund's exceedance of a criterion, metric, or threshold provided for in the fund's risk guidelines established under paragraph (c)(1)(ii) of this section or by the stress testing described in paragraph (c)(1)(iii) of this section.

(vi) *Periodic review of the program.* The derivatives risk manager must review the program at least annually to evaluate the program's effectiveness and to reflect changes in risk over time. The periodic review must include a review of the VaR calculation model used by the fund under paragraph (c)(2) of this section (including the backtesting required by paragraph (c)(1)(iv) of this section) and any designated reference portfolio to evaluate whether it remains appropriate.

(2) *Limit on fund leverage risk.* (i) The fund must comply with the relative VaR test unless the derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, taking

into account the fund's investments, investment objectives, and strategy. A fund that does not apply the relative VaR test must comply with the absolute VaR test.

(ii) The fund must determine its compliance with the applicable VaR test at least once each business day. If the fund determines that it is not in compliance with the applicable VaR test, the fund must come back into compliance promptly after such determination, in a manner that is in the best interests of the fund and its shareholders.

(iii) If the fund is not in compliance with the applicable VaR test within five business days:

(A) The derivatives risk manager must provide a written report to the fund's board of directors and explain how and by when (*i.e.*, number of business days) the derivatives risk manager reasonably expects that the fund will come back into compliance;

(B) The derivatives risk manager must analyze the circumstances that caused the fund to be out of compliance for more than five business days and update any program elements as appropriate to address those circumstances; and

(C) The derivatives risk manager must provide a written report within thirty calendar days of the exceedance to the fund's board of directors explaining how the fund came back into compliance and the results of the analysis and updates required under paragraph (c)(2)(iii)(B) of this section. If the fund remains out of compliance with the applicable VaR test at that time, the derivatives risk manager's written report must update the report previously provided under paragraph (c)(2)(iii)(A) of this section and the derivatives risk manager must update the board of directors on the fund's progress in coming back into compliance at regularly scheduled intervals at a frequency determined by the board.

(3) *Board oversight and reporting—(i) Approval of the derivatives risk manager.* A fund's board of directors, including a majority of directors who are not interested persons of the fund, must approve the designation of the derivatives risk manager.

(ii) *Reporting on program implementation and effectiveness.* On or before the implementation of the program, and at least annually thereafter, the derivatives risk manager

must provide to the board of directors a written report providing a representation that the program is reasonably designed to manage the fund's derivatives risks and to incorporate the elements provided in paragraphs (c)(1)(i) through (vi) of this section. The representation may be based on the derivatives risk manager's reasonable belief after due inquiry. The written report must include the basis for the representation along with such information as may be reasonably necessary to evaluate the adequacy of the fund's program and, for reports following the program's initial implementation, the effectiveness of its implementation. The written report also must include, as applicable, the derivatives risk manager's basis for the approval of any designated reference portfolio or any change in the designated reference portfolio during the period covered by the report; or an explanation of the basis for the derivatives risk manager's determination that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test.

(iii) *Regular board reporting.* The derivatives risk manager must provide to the board of directors, at a frequency determined by the board, a written report regarding the derivatives risk manager's analysis of exceedances described in paragraph (c)(1)(ii) of this section, the results of the stress testing conducted under paragraph (c)(1)(iii) of this section, and the results of the backtesting conducted under paragraph (c)(1)(iv) of this section since the last report to the board. Each report under this paragraph must include such information as may be reasonably necessary for the board of directors to evaluate the fund's response to exceedances and the results of the fund's stress testing.

(4) *Limited derivatives users.* (i) A fund is not required to adopt a program as prescribed in paragraph (c)(1) of this section, comply with the limit on fund leverage risk in paragraph (c)(2) of this section, or comply with the board oversight and reporting requirements as prescribed in paragraph (c)(3) of this section, if:

(A) The fund adopts and implements written policies and procedures reasonably designed to manage the fund's derivatives risk; and

(B) The fund's derivatives exposure does not exceed 10 percent of the fund's net assets, excluding, for this purpose, currency or interest rate derivatives that hedge currency or interest rate risks associated with one or more specific equity or fixed-income investments held by the fund (which must be foreign-currency-denominated in the case of currency derivatives), or the fund's borrowings, provided that the currency or interest rate derivatives are entered into and maintained by the fund for hedging purposes and that the notional amounts of such derivatives do not exceed the value of the hedged investments (or the par value thereof, in the case of fixed-income investments, or the principal amount, in the case of borrowing) by more than 10 percent.

(ii) If a fund's derivatives exposure exceeds 10 percent of its net assets, as calculated in accordance with paragraph (c)(4)(i)(B) of this section, and the fund is not in compliance with that paragraph within five business days, the fund's investment adviser must provide a written report to the fund's board of directors informing them whether the investment adviser intends either:

(A) To reduce the fund's derivatives exposure to less than 10 percent of the fund's net assets promptly, but within no more than thirty calendar days of the exceedance, in a manner that is in the best interests of the fund and its shareholders; or

(B) For the fund to establish a program as prescribed in paragraph (c)(1) of this section, comply with the limit on fund leverage risk in paragraph (c)(2) of this section, and comply with the board oversight and reporting requirements as prescribed in paragraph (c)(3) of this section, as soon as reasonably practicable.

(5) *Leveraged/inverse funds.* A leveraged/inverse fund that cannot comply with the limit on fund leverage risk in paragraph (c) of this section is not required to comply with the limit on fund leverage risk if, in addition to complying with all other applicable requirements of this section:

(i) As of October 28, 2020, the fund is in operation; has outstanding shares issued in one or more public offerings to investors; and discloses in its prospectus a leverage multiple or

inverse multiple that exceeds 200% of the performance or the inverse of the performance of the underlying index;

(ii) The fund does not change the underlying market index or increase the level of leveraged or inverse market exposure the fund seeks, directly or indirectly, to provide; and

(iii) The fund discloses in its prospectus that it is not subject to the limit on fund leverage risk in paragraph (c)(2) of this section.

(6) *Recordkeeping*—(i) *Records to be maintained*. A fund must maintain a written record documenting, as applicable:

(A) The fund's written policies and procedures required by paragraph (c)(1) of this section, along with:

(1) The results of the fund's stress tests under paragraph (c)(1)(iii) of this section;

(2) The results of the backtesting conducted under paragraph (c)(1)(iv) of this section;

(3) Records documenting any internal reporting or escalation of material risks under paragraph (c)(1)(v)(B) of this section; and

(4) Records documenting the reviews conducted under paragraph (c)(1)(vi) of this section.

(B) Copies of any materials provided to the board of directors in connection with its approval of the designation of the derivatives risk manager, any written reports provided to the board of directors relating to the program, and any written reports provided to the board of directors under paragraphs (c)(2)(iii)(A) and (C) of this section.

(C) Any determination and/or action the fund made under paragraphs (c)(2)(i) and (ii) of this section, including a fund's determination of: the VaR of its portfolio; the VaR of the fund's designated reference portfolio, as applicable; the fund's VaR ratio (the value of the VaR of the fund's portfolio divided by the VaR of the designated reference portfolio), as applicable; and any updates to any VaR calculation models used by the fund and the basis for any material changes thereto.

(D) If applicable, the fund's written policies and procedures required by paragraph (c)(4) of this section, along with copies of any written reports provided to the board of directors under paragraph (c)(4)(ii) of this section.

(ii) *Retention periods.* (A) A fund must maintain a copy of the written policies and procedures that the fund adopted under paragraph (c)(1) or (4) of this section that are in effect, or at any time within the past five years were in effect, in an easily accessible place.

(B) A fund must maintain all records and materials that paragraphs (c)(6)(i)(A)(I) through (4) and (c)(6)(i)(B) through (D) of this section describe for a period of not less than five years (the first two years in an easily accessible place) following each determination, action, or review that these paragraphs describe.

(7) *Current reports.* A fund that experiences an event specified in the parts of Form N-RN [referenced in 17 CFR 274.223] titled "Relative VaR Test Breaches," "Absolute VaR Test Breaches," or "Compliance with VaR Test" must file with the Commission a report on Form N-RN within the period and according to the instructions specified in that form.

(d) *Reverse repurchase agreements.* (1) A fund may enter into reverse repurchase agreements or similar financing transactions, notwithstanding the requirements of sections 18(c) and 18(f)(1) of the Investment Company Act, if the fund:

(i) Complies with the asset coverage requirements of section 18, and combines the aggregate amount of indebtedness associated with all reverse repurchase agreements or similar financing transactions with the aggregate amount of any other senior securities representing indebtedness when calculating the asset coverage ratio; or

(ii) Treats all reverse repurchase agreements or similar financing transactions as derivatives transactions for all purposes under this section.

(2) A fund relying on paragraph (d) of this section must maintain a written record documenting whether the fund is relying on paragraph (d)(1)(i) or (ii) of this section for a period of not less than five years (the first two years in an easily accessible place) following the determination.

(e) *Unfunded commitment agreements.* (1) A fund may enter into an unfunded commitment agreement, notwithstanding the requirements of sections 18(a), 18(c), 18(f)(1), and 61 of the Investment Company Act, if the fund reasonably believes, at the time it enters into such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to all of its unfunded commitment agreements, in each case as they come due. In forming a reasonable belief, the fund must take into account its reasonable expectations with respect to other obligations (including any obligation with respect to senior securities or redemptions), and may not take into account cash that may become available from the sale or disposition of any investment at a price that deviates significantly from the market value of those investments, or from issuing additional equity. Unfunded commitment agreements entered into by the fund in compliance with this section will not be considered for purposes of computing asset coverage, as defined in section 18(h) of the Investment Company Act (15 U.S.C. 80a-18(h)).

(2) For each unfunded commitment agreement that a fund enters into under paragraph (e)(1) of this section, a fund must document the basis for its reasonable belief regarding the sufficiency of its cash and cash equivalents to meet its unfunded commitment agreement obligations, and maintain a record of this documentation for a period of not less than five years (the first two years in an easily accessible place) following the date that the fund entered into the agreement.

(f) *When issued, forward-settling, and non-standard settlement cycle securities transactions.* Notwithstanding the requirements of sections 18(a)(1), 18(c), 18(f)(1), and 61 of the Investment Company Act (15 U.S.C. 80a-18(a)(1), 80a-18(c), 80a-18(f)(1), and 80a-60), a fund or registered open-end company that is regulated as a money market fund under § 270.2a-7 may invest in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle, and the transaction will be deemed not to involve a senior security, provided that: The fund intends to physically settle the transaction; and the transaction will settle within 35 days of its trade date.

6. Amend § 270.22e-4 by revising paragraph (b)(1)(ii)(C), note to paragraph (b)(1)(ii)(C) and paragraph (b)(1)(iii)(B) to read as follows:

§ 270.22e-4 Liquidity risk management programs.

* * * * *

(b) * * *

(1) * * *

(ii) * * *

(C) For derivatives transactions that the fund has classified as moderately liquid investments, less liquid investments, and illiquid investments, identify the percentage of the fund's highly liquid investments that it has pledged as margin or collateral in connection with derivatives transactions in each of these classification categories.

NOTE TO PARAGRAPH (b)(1)(ii)(C): For purposes of calculating these percentages, a fund that has pledged highly liquid investments and non-highly liquid investments as margin or collateral in connection with derivatives transactions classified as moderately liquid, less liquid, or illiquid investments first should apply pledged assets that are highly liquid investments in connection with these transactions, unless it has specifically identified non-highly liquid investments as margin or collateral in connection with such derivatives transactions.

* * * * *

(iii) * * *

(B) For purposes of determining whether a fund primarily holds assets that are highly liquid investments, a fund must exclude from its calculations the percentage of the fund's assets that are highly liquid investments that it has pledged as margin or collateral in connection with derivatives transactions that the fund has classified as moderately liquid investments, less liquid investments, and illiquid investments, as determined pursuant to paragraph (b)(1)(ii)(C) of this section.

* * * * *

7. Revise § 270.30b1-10 to read as follows:

§ 270.30b1-10 Current report for open-end and closed-end management investment companies.

Every registered open-end management investment company, or series thereof, and every registered closed-end management investment company, but not a fund that is regulated as a money market fund under § 270.2a-7, that experiences an event specified on Form N-RN, must file with the Commission a current report on Form N-RN within the period and according to the instructions specified in that form.

PART 274—FORMS PRESCRIBED UNDER THE INVESTMENT COMPANY ACT OF 1940

8. The authority for part 274 continues to read in part as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 78c(b), 78l, 78m, 78n, 78o(d), 80a-8, 80a-24, 80a-26, 80a-29, and Pub. L. 111-203, sec. 939A, 124 Stat. 1376 (2010), unless otherwise noted.

* * * * *

9. Amend Form N-2 (referenced in §§ 239.14 and 274.11a-1) by revising instruction 2. to sub-item “3. *Senior Securities*” of “Item 4. Financial Highlights” to read as follows:

Note: The text of Form N-2 does not, and this amendment will not, appear in the *Code of Federal Regulations*.

Form N-2

* * * * *

Item 4. Financial Highlights

* * * * *

3. Senior Securities

* * * * *

Instructions

* * * * *

2. Use the method described in section 18(h) of the 1940 Act [15 U.S.C. 80a-18(h)] to calculate the asset coverage to be set forth in column (3). However, in lieu of expressing asset coverage in

terms of a ratio, as described in section 18(h), express it for each class of senior securities in terms of dollar amounts per share (in the case of preferred stock) or per \$1,000 of indebtedness (in the case of senior indebtedness). A fund should not consider any derivatives transactions, or any unfunded commitment agreements, that it enters into in compliance with rule 18f-4 under the Investment Company Act [17 CFR 270.18f-4] for purposes of computing asset coverage.

* * * * *

10. Amend Form N-CEN (referenced in §§ 249.330 and 274.101) by adding new Item C.7.n. to read as follows:

Note: The text of Form N-CEN does not, and this amendment will not, appear in the *Code of Federal Regulations*.

**FORM N-CEN
ANNUAL REPORT FOR REGISTERED INVESTMENT COMPANIES**

* * * * *

Item C.7. * * *

n. Rule 18f-4 (17 CFR 270.18f-4): _____

i. Is the Fund excepted from the rule 18f-4 (17 CFR 270.18f-4) program requirement and limit on fund leverage risk under rule 18f-4(c)(4) (17 CFR 270.18f-4(c)(4))? _____

ii. Is the Fund a leveraged/inverse fund that, under rule 18f-4(c)(5) (17 CFR 270.18f-4(c)(5)), is excepted from the requirement to comply with the limit on fund leverage risk described in rule 18f-4(c)(2) (17 CFR 270.18f-4(c)(2))? _____

iii. Did the Fund enter into any reverse repurchase agreements or similar financing transactions under rule 18f-4(d)(i) (17 CFR 270.18f-4(d)(i))? _____

- iv. Did the Fund enter into any reverse repurchase agreements or similar financing transactions under rule 18f-4(d)(ii) (17 CFR 270.18f-4(d)(ii))? _____
- v. Did the Fund enter into any unfunded commitment agreements under rule 18f-4(e) (17 CFR 270.18f-4(e))? _____
- vi. Did the Fund invest in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle, in reliance on rule 18f-4(f) (17 CFR 270.18f-4(f))? _____

* * * * *

11. Amend Form N-PORT (referenced in § 274.150) by:

- a. Adding to General Instruction E. “Definitions” the parenthetical “(including rule 18f-4 solely for Items B.9 and 10 of the Form)” in the introductory paragraph, and adding in alphabetical order, the following definitions:
 - i. “Absolute VaR Test”;
 - ii. “Derivatives Exposure”;
 - iii. “Designated Index”;
 - iv. “Designated Reference Portfolio”;
 - v. “Relative VaR Test”;
 - vi. “Securities Portfolio”;
 - vii. “Value-at-Risk”; and
 - viii. “VaR Ratio”.
- b. Revising General Instruction F “Public Availability” to add the text “Derivatives Exposure for limited derivatives users (Item B.9), median daily VaR (Item B.10.a), median VaR Ratio (Item B.10.b.iii),” and “VaR backtesting results (Item B.10.c),”.

- c. Revising Item B.8 to replace the text “segregated to cover or pledged to satisfy margin requirements” with “pledged as margin or collateral,” and to add after the enumerated liquidity categories the text “For purposes of Item B.8, when computing the required percentage, the denominator should only include assets (and exclude liabilities) that are categorized by the Fund as Highly Liquid Investments.”
- d. Adding Items B.9 and B.10.

The additions and revisions read as follows:

Note: The text of Form N-PORT does not, and this amendment will not, appear in the *Code of Federal Regulations*.

Form N-PORT **MONTHLY PORTFOLIO INVESTMENTS REPORT**

* * * * *

GENERAL INSTRUCTIONS

* * * * *

E. Definitions

References to sections and rules in this Form N-PORT are to the Act, unless otherwise indicated.

Terms used in this Form N-PORT have the same meanings as in the Act or related rules (including rule 18f-4 solely for Items B.9 and 10 of the Form), unless otherwise indicated.

* * * * *

“Absolute VaR Test” has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“Derivatives Exposure” has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“Designated Index” has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“Designated Reference Portfolio” has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“Relative VaR Test” has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“Securities Portfolio” has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“Value-at-Risk” or VaR has the meaning defined in rule 18f-4(a) [17 CFR 270.18f-4(a)].

* * * * *

“VaR Ratio” means the value of the Fund’s portfolio VaR divided by the VaR of the Designated Reference Portfolio.

* * * * *

F. Public Availability

Information reported on Form N-PORT for the third month of each Fund’s fiscal quarter will be made publicly available 60 days after the end of the Fund’s fiscal quarter.

The SEC does not intend to make public the information reported on Form N-PORT for the first and second months of each Fund’s fiscal quarter that is identifiable to any particular fund or adviser, or any information reported with respect to a Fund’s Highly Liquid Investment Minimum (Item B.7), derivatives transactions (Item B.8), Derivatives Exposure for limited derivatives users (Item B.9), median daily VaR (Item B.10.a), median VaR Ratio (Item B.10.b.iii), VaR backtesting results (Item B.10.c), country of risk and economic exposure (Item C.5.b), delta (Items C.9.f.v, C.11.c.vii, or C.11.g.iv), liquidity classification for portfolio investments (Item C.7), or miscellaneous securities (Part D), or explanatory notes related to any of those topics (Part E) that is identifiable to any particular fund or adviser. However, the SEC may use information reported on this Form in its regulatory programs, including examinations, investigations, and enforcement actions.

* * * * *

PART B. * * *

Item B.8. Derivatives Transactions. For portfolio investments of open-end management investment companies, provide the percentage of the Fund’s Highly Liquid

Investments that it has pledged as margin or collateral in connection with derivatives transactions that are classified among the following categories as specified in rule 22e-4 [17 CFR 270.22e-4]:

1. Moderately Liquid Investments
2. Less Liquid Investments
3. Illiquid Investments

For purposes of Item B.8, when computing the required percentage, the denominator should only include assets (and exclude liabilities) that are categorized by the Fund as Highly Liquid Investments.

Item B.9 Derivatives Exposure for limited derivatives users. If the Fund is excepted from the rule 18f-4 [17 CFR 270.18f-4] program requirement and limit on fund leverage risk under rule 18f-4(c)(4) [17 CFR 270.18f-4(c)(4)], provide the following information:

- a. Derivatives exposure (as defined in rule 18f-4(a) [17 CFR 270.18f-4(a)]), reported as a percentage of the Fund's net asset value.
- b. Exposure from currency derivatives that hedge currency risks, as provided in rule 18f-4(c)(4)(i)(B) [17 CFR 270.18f-4(c)(4)(i)(B)], reported as a percentage of the Fund's net asset value.
- c. Exposure from interest rate derivatives that hedge interest rate risks, as provided in rule 18f-4(c)(4)(i)(B) [17 CFR 270.18f-4(c)(4)(i)(B)], reported as a percentage of the Fund's net asset value.
- d. The number of business days, if any, in excess of the five-business-day period described in rule 18f-4(c)(4)(ii) [17 CFR 270.18f-4(c)(4)(ii)], that the Fund's derivatives exposure exceeded 10 percent of its net assets during the reporting period.

Item B.10 VaR information. For Funds subject to the limit on fund leverage risk described in rule 18f-4(c)(2) [17 CFR 270.18f-4(c)(2)], provide the following information, as

determined in accordance with the requirement under rule 18f-4(c)(2)(ii) to determine the fund's compliance with the applicable VaR test at least once each business day:

- a. Median daily VaR during the reporting period, reported as a percentage of the Fund's net asset value.
- b. For Funds that were subject to the Relative VaR Test during the reporting period, provide:
 - i. As applicable, the name of the Fund's Designated Index, or a statement that the Fund's Designated Reference Portfolio is the Fund's Securities Portfolio.
 - ii. As applicable, the index identifier for the Fund's Designated Index.
 - iii. Median VaR Ratio during the reporting period, reported as a percentage of the VaR of the Fund's Designated Reference Portfolio.
- c. Backtesting Results. Number of exceptions that the Fund identified as a result of its backtesting of its VaR calculation model (as described in rule 18f-4(c)(1)(iv) [17 CFR 270.18f-4(c)(1)(iv)] during the reporting period.

* * * * *

12. Revise § 274.223 to read as follows:

§ 274.223 Form N-RN, Current report, open- and closed-end investment company reporting.

This form shall be used by registered open-end management investment companies, or series thereof, and closed-end management investment companies, to file reports pursuant to § 270.18f-4(c)(7) and § 270.30b1-10 of this chapter.

13. Revise Form N-LIQUID (referenced in § 274.223) and its title to read as follows:

Note: The text of Form N-RN does not, and this amendment will not, appear in the *Code of Federal Regulations*.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM N-RN
CURRENT REPORT FOR REGISTERED MANAGEMENT INVESTMENT
COMPANIES AND BUSINESS DEVELOPMENT COMPANIES

Form N-RN is to be used by a registered open-end management investment company or series thereof, but not including a fund that is regulated as a money market fund under rule 2a-7 under the Act (17 CFR 270.2A-7) (a “registered open-end fund”), a registered closed-end management investment company (a “registered closed-end fund”), or a closed-end management investment company that has elected to be regulated as a business development company (a “business development company”), to file current reports with the Commission pursuant to rule 18f-4(c)(7) and rule 30b1-10 under the Investment Company of 1940 Act [15 U.S.C. 80a] (“Act”) (17 CFR 270.18f-4(c)(7); 17 CFR 270.30b1-10). The Commission may use the information provided on Form N-RN in its regulatory, disclosure review, inspection, and policymaking roles.

GENERAL INSTRUCTIONS

A. Rules as to Use of Form N-RN.

(1) Form N-RN is the reporting form that is to be used for current reports of registered open-end funds (not including funds that are regulated as money market funds under rule 2a-7 under the Act), registered closed-end funds, and business development companies (together, “registrants”) required by, as applicable, section 30(b) of the Act and rule 30b1-10 under the Act, as well as rule 18f-4(c)(7) under the Act. The Commission does not intend to make public information reported on Form N-RN that is identifiable to any particular registrant, although the Commission may use Form N-RN information in an enforcement action.

(2) Unless otherwise specified, a report on this Form N-RN is required to be filed, as applicable, within one business day of the occurrence of the event specified in Parts B – G of this

form. If the event occurs on a Saturday, Sunday, or holiday on which the Commission is not open for business, then the one business day period shall begin to run on, and include, the first business day thereafter.

(3) For registered open-end funds required to comply with rule 22e-4 under the Investment Company Act [17 CFR 270.22e-4], complete Parts B – D of this form, as applicable. For registrants that are subject to a VaR test under rule 18f-4(c)(2)(i) [17 CFR 270.18f-4(c)(2)(i)], complete Parts E – G of this form, as applicable.

B. Application of General Rules and Regulations

The General Rules and Regulations under the Act contain certain general requirements that are applicable to reporting on any form under the Act. These general requirements should be carefully read and observed in the preparation and filing of reports on this form, except that any provision in the form or in these instructions shall be controlling.

C. Information to Be Included in Report Filed on Form N-RN

Upon the occurrence of the event specified in Parts B – G of Form N-RN, as applicable, a registrant must file a report on Form N-RN that includes information in response to each of the items in Part A of the form, as well as each of the items in the applicable Parts B – G of the Form.

D. Filing of Form N-RN

A registrant must file Form N-RN in accordance with rule 232.13 of Regulation S-T (17 CFR Part 232). Form N-RN must be filed electronically using the Commission's Electronic Data Gathering, Analysis and Retrieval System ("EDGAR").

E. Paperwork Reduction Act Information

A registrant is not required to respond to the collection of information contained in Form N-RN unless the form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection

burden estimate and any suggestions for reducing the burden to the Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. 3507.

F. Definitions

References to sections and rules in this Form N-RN are to the Investment Company Act (15 U.S.C 80a), unless otherwise indicated. Terms used in this Form N-RN have the same meaning as in the Investment Company Act, rule 22e-4 under the Investment Company Act (for Parts B-D of the Form), or rule 18f-4 under the Investment Company Act (for Part E – G of the Form), unless otherwise indicated. In addition, as used in this Form N-RN, the term registrant means the registrant or a separate series of the registrant, as applicable.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

**FORM N-RN
CURRENT REPORT
FOR
REGISTERED MANAGEMENT INVESTMENT COMPANIES
AND BUSINESS DEVELOPMENT COMPANIES**

PART A. General Information

- Item A.1.** Report for [mm/dd/yyyy].
- Item A.2.** Name of Registrant.
- Item A.3.** CIK Number of registrant.
- Item A.4.** Name of Series, if applicable.
- Item A.3.** EDGAR Series Identifier, if applicable.
- Item A.4.** Securities Act File Number, if applicable.
- Item A.5.** Provide the name, e-mail address, and telephone number of the person authorized to receive information and respond to questions about this Form N-RN.

PART B. Above 15% Illiquid Investments

If more than 15 percent of the registrant's net assets are, or become, illiquid investments that are assets as defined in rule 22e-4, then report the following information:

- Item B.1.** Date(s) on which the registrant's illiquid investments that are assets exceeded 15 percent of its net assets.
- Item B.2.** The current percentage of the registrant's net assets that are illiquid investments that are assets.
- Item B.3.** Identification of illiquid investments. For each investment that is an asset that is held by the registrant that is considered illiquid, disclose (1) the name of the issuer, the title of the issue or description of the investment, the CUSIP (if any), and at least one other identifier, if available (*e.g.*, ISIN, Ticker, or other unique identifier (if ticker and ISIN are not available)) (indicate the type of identifier used), and (2) the percentage of the fund's net assets attributable to that investment.

PART C. At or Below 15% Illiquid Investments

If a registrant that has filed Part B of Form N-RN determines that its holdings in illiquid investments that are assets have changed to be less than or equal to 15 percent of the registrant's net assets, then report the following information:

- Item C.1.** Date(s) on which the registrant's illiquid investments that are assets fell to or below 15 percent of net assets.
- Item C.2.** The current percentage of the registrant's net assets that are illiquid investments that are assets.

PART D. Assets that are Highly Liquid Investments Below the Highly Liquid Investment Minimum

If a registrant's holdings in assets that are highly liquid investments fall below its highly liquid investment minimum for more than 7 consecutive calendar days, then report the following information:

Item D.1. Date(s) on which the registrant's holdings of assets that are highly liquid investments fell below the fund's highly liquid investment minimum.

PART E. Relative VaR Test Breaches

If a registrant is subject to the relative VaR test under rule 18f-4(c)(2)(i) [17 CFR 270.18f-4(c)(2)(i)], and the fund determines that it is not in compliance with the relative VaR test and has not come back into compliance within 5 business days after such determination, provide:

Item E.1. The dates on which the VaR of the registrant's portfolio exceeded 200% or 250% (as applicable under rule 18f-4 [17 CFR 270.18f-4]) of the VaR of its designated reference portfolio.

Item E.2. The VaR of the registrant's portfolio on the dates each exceedance occurred.

Item E.3. The VaR of the registrant's designated reference portfolio on the dates each exceedance occurred.

Item E.4. As applicable, either the name of the registrant's designated index, or a statement that the registrant's designated reference portfolio is the registrant's securities portfolio.

Item E.5. As applicable, the index identifier for the registrant's designated index.

PART F. Absolute VaR Test Breaches

If a registrant is subject to the absolute VaR test under rule 18f-4(c)(2)(i) [17 CFR 270.18f-4(c)(2)(i)], and the fund determines that it is not in compliance with the absolute VaR

test and has not come back into compliance within 5 business days after such determination, provide:

Item F.1. The dates on which the VaR of the registrant's portfolio exceeded 20% or 25% (as applicable under rule 18f-4 [17 CFR 270.18f-4]) of the value of the registrant's net assets.

Item F.2. The VaR of the registrant's portfolio on the dates each exceedance occurred.

Item F.3. The value of the registrant's net assets on the dates each exceedance occurred.

PART G. Compliance with VaR Test

If a registrant that has filed Part E or Part F of Form N-RN has come back into compliance with either the relative VaR test or the absolute VaR test, as applicable, then report the following information:

Item G.1. Dates on which the VaR of the registrant's portfolio exceeded applicable VaR limit described in Item E.1 or Item F.1.

Item G.2. The current VaR of the registrant's portfolio.

PART H. Explanatory Notes (if any)

A registrant may provide any information it believes would be helpful in understanding the information reported in response to any Item of this Form.

SIGNATURES

Pursuant to the requirements of the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

(Registrant)

Date _____

(Signature)*

*Print name and title of the signing officer under his/her signature.

By the Commission.

Dated: November 2, 2020

Vanessa A Countryman

Secretary

[FR Doc. 2020-24781 Filed: 12/18/2020 8:45 am; Publication Date: 12/21/2020]